



College AND UNIVERSITY Business

**MARCH 1949: Dealing With Unions ★ Liability Insurance ★ Snack
Bar ★ College Operated Businesses ★ Building Designs ★ Installing a
President ★ Relationships in Purchasing ★ Student Health Service**



NEEDED: A TRAINING PROGRAM

FOR COLLEGE BUSINESS OFFICERS

CLARENCE SCHEPS

Executive Assistant to the President
Tulane University

BUSINESS MANAGEMENT AND ADMINISTRATION in the college and university, after relatively slow development, is approaching maturity. In practically all larger institutions of higher learning the chief business officer has a rank coordinate with that of major academic officers.

The ascendance of the business office to an important place in the administration of the college and university brings with it responsibilities and challenges that business officers must face. They must qualify themselves through training and experience to discharge these important responsibilities. They must be able, educationally, to sit at the university council table with the academic officers. Unfortunately, many business officers have drifted into their positions without benefit of advance planning or specific training. Frequently, the business officer has come from the business world where he was a corporation executive, an accountant, a bank cashier, or the manager of a small commercial enterprise.

At a meeting of a regional association of college and university business officers last spring, the question was asked: "How many of you are specifically trained for your present job?" Only two of the seventy-five business officers in attendance considered themselves specifically trained for the administrative positions that they were holding. Furthermore, the replies indicated that only one-fourth of them had attained their present positions as college business officers by working up through the ranks. In presenting this evidence of the need of more effective training for college business officers, there is no implication that these men are not competent. On the contrary, they are performing an invaluable service to their institutions. However, if college business managership is to attain the status of a profession, and if the business office is to serve the educational institution with maximum efficiency, there is need for improvement in the standards.

All evidence at hand indicates that there is definite need of an adequate training program for col-

lege business office personnel. There are two kinds of training programs which, if operated together, may offer a solution to the problem. One type of training consists of formal work in an educational institution. At present, several universities offer work in educational administration. However, the emphasis in most of these programs seems to be on elementary and secondary school administration.

Admittedly, there are not enough positions opening each year in the field of university business management to make it practical for many universities to offer a specialized curriculum. However, there should be enough demand for qualified personnel to encourage at least a few universities to offer special degrees or programs in college and university business management.

The second type of training has a dual purpose—improvement in the standards of present business office personnel and production of competent replacements. Every university business office should be conducting its own on-the-job training program to improve efficiency and to prepare qualified replacements. Employees should be encouraged to take advanced degrees and specialized courses in subjects allied to their work. In-service training may also take the form of short courses, workshops and intensive training programs conducted jointly by a number of universities.

If this type of training is to be initiated, it probably will have to center on the business officer associations. Unfortunately, there is no national association of college and university business officers to lend nationwide emphasis and prestige to such training programs. The tragic failure of business officers to merge themselves into a national organization also hampers the establishment of higher standards of competence for those entrusted with the responsibility of business management in the university.

Even so, the regional associations by a redirection of their present type of convention could make a beginning in the field of training programs.

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BOYNTON S. KAISER, chief personnel officer of the University of California, has been interested in personnel work ever since his undergraduate days. He has successively been associated with the bureau of personnel of the Indiana Home Owners Loan Corporation and the Michigan and Minnesota civil service departments. Following this he became regional personnel director of the National Youth Administration in California, and since 1942 he has been in his present position. He is currently serving as vice president of the College and University Personnel Association. An active writer, he has several magazine articles and a book to his credit. In a lighter mood, he gets sore muscles as a mountain climber and skier.



C. W. Hayes

CHARLES W. HAYES, supervisor of purchases at Emory University, is a former science teacher who early in his career crossed over to the administrative side of higher education as business manager of Georgetown College in Kentucky. He later became supervisor of purchases at the University of Kentucky and accepted his present position in 1944. In addition to purchasing, he has done research work in psychology which has been published. In a more frivolous mood he indulges in bridge, whodunits, checkers, fishing and admits a special taste in good food, sweet music, Jack Benny and Fred Allen. . . . DR. EDWARD HURTADO, director of the student health service at Rutgers University, was a New York City urologist prior to his entry into educational circles. Dr. Hurtado is a graduate of the National University of Medicine at Bogota, Colombia.



M. M. Hare

MICHAEL M. HARE, member of the New York firm of architects of Hare and Elder, has been a close student of college union buildings and programs and has been the consulting architect of the Association of College Unions since 1940. His work has been recognized within the architectural profession and by frequent publication of his projects in architectural magazines. His most widely known building is the theater and recreation center of the Wisconsin Memorial Union at the University of Wisconsin. . . . FRED H. TURNER, dean of students at the University of Illinois, had the distinction of succeeding Thomas A. Clark, dean of men at the university for thirty-one years and the originator of the position in higher education administration. Dean Turner has been in his present position since 1943. Previous to that he served as assistant dean of men at Illinois, his alma mater, from 1922 to 1931. He was acting dean of men for a year, becoming dean in 1932. He is a former officer and president of many academic societies and fraternities. During the war he was a civilian member of the committee that drafted the army air force reserve plan. He has been an honorary member of the St. Louis Naval Aviation Cadet Selection Board since 1942. Hobbies? He lists gardening, music and woodworking.



Photograph by Detroit Times

Colleges have much to learn about **DEALING WITH UNIONS**

—chiefly not to let discussants retire into two belligerent camps

UNIONS HAVE COME TO COLLEGE—to organize nonacademic employees. Of course, some colleges and universities have dealt with union groups for many years, but others find union relations something new on the administrative horizon.

What kinds of unions may be found at college? Any one or a combination of the following already exist in many such environments: American Federation of Labor, Congress of Industrial Organizations, unaffiliated unions, and employe associations.

Some unions and employe associations are interested in organizing all employes at a state or municipal university into one group. Others are organized along occupational lines, such as the building trades with a local for each trade, operating engineers, truck drivers, and kitchen help. Others are interested in broader groups, such as clerical or laboratory personnel.

BOYNTON S. KAISER

Director of Personnel
University of California

Certain unique characteristics of educational institutions make labor negotiations somewhat different from what they are in business. For example, colleges are on annual budgets that cannot be boosted by raising the price of products or procuring a higher income during the year. This holds for state supported institutions and is particularly pressing in the case of many private colleges that have no ready means of increasing their incomes.

If unionization is close at hand, what should the college administrator expect, and what should he do?

An organizing situation usually develops along fairly standard lines. In a typical case, rumors develop on the campus that an organizer is present, talking with employes. Mixed reac-

tions on the part of college administrators follow immediately—feelings are hurt because "we have always treated our employes fairly"; some are fearful that the employes will strike; others wonder what working conditions will be demanded; others worry about how much it is going to cost; some are certain that the organizing effort will fail because the old employes are loyal to the established system and will not join; others consider talking to the employes to convince them they have nothing to gain by joining.

During this stage numerous reports from employes reach the ears of the administration, ears which, of course, are open for any new developments. Then follows a brief period of watching and waiting on the part of the administration.

Finally, one of two things occurs. The organizing effort fails or it succeeds. If it succeeds, the union will

communicate with the college authorities in writing, or its representatives will come in to talk things over and make known the union's requests. After hearing the union point of view, the administrator should indicate that union requests will be studied carefully and that every effort will be made to come to an agreement. If he is a fair and judicious representative of both the employees and management—as in the long run he should be—he will mean it when he makes this statement and will work toward the best settlement for all concerned.

The union should be asked to present sound reasons and area comparisons for every request it makes. If this is done, the chances are few that the union will choose the college as the first employer in the area to be asked for special benefits that are out of line with those granted by other employers. This applies particularly to requests for wage and salary increases.

A college can seldom afford to lead or lag for long periods of time in matters of this kind. Valid and reliable wage data should be required and checked carefully. Doing this will save a great deal of time. Both management and unions have been known to make general statements concerning wages that are hard or even impossible to justify. It is essential to stick to the facts. The reputation gained thereby is well worth the initial effort.

RESEARCH AND NEGOTIATION

Dealings with unions can logically be divided into two parts, namely, research and negotiation. The purpose of research is to find the facts concerning conditions inside the college and prevailing wages and working conditions found elsewhere. The negotiation is then founded on comparisons and recommendations drawn from these facts. However, negotiations do not always lead to logical conclusions based on an accurate review of facts.

Frequently those who do the research do not do the negotiating. A negotiator is an expert at obtaining a bargain; if he is skilled, he knows all the tricks of the trade, all the arts of persuasion, cajolery, argument and threat of dire administrative consequences unless requests are acceded to. Management should have skillful negotiators equal to those of the union representative.

Now the college administrator is ready to enter the field of collective bargaining. It may be an entirely new

experience for him, one for which he has little background either in theory or in practice. If he is dealing with a sophisticated union, he may easily be caught unprepared and may make serious mistakes. A few suggested guideposts to the course he should take in order to avoid such mistakes will be mentioned.

To many colleges and universities expert advice in these matters is available locally. If the college has an institute of industrial relations, the advice of its director and staff should be sought early and continuously, to ascertain acceptable industrial relations practices in the area. If multi-employer



bargaining occurs in the area, serious consideration should be given to joining the employer group. This arrangement predominates on the West Coast where small companies have had to deal with local affiliates of strong national unions. Group employer action was the means of getting a fair collective bargaining balance. A college or university seldom can expect to match the power of a strong national union. "Master contracts," suitable except for small modification, may thus be available through group employer action.

For example, the University of California has turned over its operating engineer negotiations at Berkeley and San Francisco to the United Employers, Inc. of Oakland, which is the employer bargaining agent for practically all operating engineer contracts in the East Bay area. The university's personnel officer and the negotiator for United Employers both confer with the union representatives during collective bargaining discussions.

Once the area of collective bargaining is established, through the written or verbal statement of the union representatives, it becomes necessary to compare the wages and benefits granted by the college, such as vacations, holidays and sick leaves, with the prevailing practice in private industry, government and other educational organizations.

These area comparisons must be accurate and up to date. The union also

will be gathering similar data, and the college administrator will be at a disadvantage if, early in the discussion, his facts are proved inadequate or incorrect. Furthermore, if he has not gathered his own facts, reliance must be placed on those presented by the union or none at all. Sometimes employee requests automatically disappear when agreement is reached on facts. The union may inadvertently have based its request on false information about what some other organization was granting in benefits or wages.

Early in the negotiation the administrator should decide how important the situation is from the union point of view. He should be able to judge what requests the union really wants granted and what ones are made for trading purposes only. As is typical in most trading situations, unions usually ask for more than they expect to receive. This is particularly true of wages. The college negotiator should be aware of this possibility, even though with some unions it will not be found to be the practice.

The union representative should not be underestimated. Unless the college negotiator is experienced in this field, the union man probably knows more about bargaining than he does. Why shouldn't he? It's his full-time job, and he wouldn't have it if he weren't good at it.

POINTS OF AGREEMENT

During the preliminary negotiations, there should be some points on which it is immediately possible to come to an agreement. This should be done as early as possible. Thus the union representative will know he is making progress and will so report to the membership. Agreement on facts, at least, should be possible. Also, minor complaints concerning working conditions affecting individual employees or jurisdictional problems frequently can be disposed of rapidly. It should be remembered that negotiation from the union point of view doesn't mean just meeting with management; it means being granted something that has been requested. Usually this is both possible and desirable.

If the college has more than one campus or deals with more than one union, care must be taken to avoid agreeing to benefits for employees in one location or in one occupation that cannot be granted to all other employees, union or nonunion. "Whipsawing" tactics by the union may be ex-

pected by administrators having more than one campus or union. The union would hope to be able to raise wage rates for the whole university to the highest paid on any one campus. Campus wage differentials, however, may be perfectly justified on the basis of local prevailing rates. By raising rates to the highest paid on any campus, the university may find itself in difficulty with other employers who pay a lower local rate.

State and municipal universities supported from state or local taxes may find similar special problems. Many of these problems derive from a high degree of relationship between the benefits and wage scales applied by the college to its employees and those applied to state and local public employees. If a state college agrees to the personnel policy of equality of benefits with those of state civil service, it may be forced by the union into benefits and wages higher than those granted by local private employers. Employer criticism usually follows a policy of excessive benefits and too high wages in comparison with others in the area.

EQUAL TREATMENT FOR ALL

One of the most difficult reconciliations between personnel philosophy and practice occurs in attempting to solve the problem of equal benefits to union and nonunion employees. Equal treatment for all, in the line of wages, salaries, working conditions, and such things, is one of the first principles of personnel policy. Opposed to this is the philosophy of many unions that involves the principle of equal treatment for all employees represented by the union. The problem of granting nonunion employees privileges equal to those of union employees is one of genuine concern to personnel officers and administrators in private industry and government, as well as those in colleges and universities.

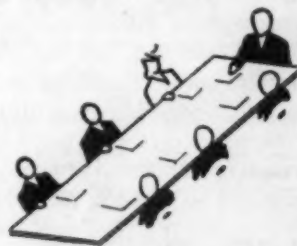
During the course of a negotiation the question may arise as to whether or not there should be a contract. Frequently nothing but a letter listing agreements is necessary. A contract, on the other hand, may be an advantage. The membership of one university union having no contract suddenly went "fishing" recently, with no notice to the university. If a contract had existed the union would have had to obtain strike approval through local union channels and the "fishing" expedition, with its concomitant morale problems, might have been prevented.

Each side of a negotiation wants to know, and has a right to know, if the other side means what it says. If the college administrator says "no" as the last word following a fair and careful evaluation of the facts, it may end the discussions if accepted by the membership. It will not accept it, however, if it feels he has been unfair or biased or that he is only bluffing. He must establish a reputation for fair dealing and for meaning what he says early in the negotiation.

If it appears during discussions that agreement will not be possible on all points, both sides should be thinking of further steps to be taken. For example, a letter presenting the problems as objectively as possible might be sent by the college directly to the employees. Occasionally the employees themselves never hear the other side of the case presented in a logical, factual form.

Another possibility is submission to a higher college authority. Particularly in the case of a negative decision, the union representative wants to be able to report to the membership that the case has been taken to the highest officials of the university. If some requests are then turned down the employees will feel that their representatives have done the best they could. On the other hand, the administrator must be careful to avoid being overruled by a higher college authority. If this occurs, the union in the future may by-pass the administrator.

Even if the decision of the highest college authority is completely unacceptable to the union, potential strikes may be avoided by further strategy in the form of arbitration. Arbitration arrangements may be any one of several types. For example, the union and management each may select a repre-



sentative. These two individuals then agree on an arbitrator whose duties and authority should be agreed to by the union and the college. Use may be made of panels of qualified persons from employers' collective bargaining organizations. In such cases union and college representatives review the panel of names until one is found satisfactory

to both. The arbitrator may then settle the disagreement in a manner acceptable to both sides.

If referral to a higher college authority is available to union representatives, the same technic is also available to college administrators. There have been cases in which state and national union officials have taken a more conservative view of a local dispute than the local union officials. The national offices can be helpful in ironing out difficulties between management and one of their local organizations.

Now that unions have been coming to college for some time, perhaps we should stop and take stock of the general situation. They have brought new problems to the college administrator, problems with which he has frequently been ill-equipped to cope. They also, however, have brought new approaches to old problems, new and effective methods of dealing with legitimate employee complaints, new concepts of the constructive part employees may play in the administration of a university.

CHANGES IN RECENT YEARS

Educational institutions, as a group, have been notorious in the past for paying low wages for long hours of work on the part of their nonacademic employees. Within recent years many of them have raised wages and granted employee benefits more in line with those of other large scale employers. This has been due, at least in part, to the activity of employee associations.

The university personnel administrator will do well to accept the new developments in employee relations, to see that he is informed on what they mean and where they are leading, and to do his part in helping to turn them in the right direction. He should enter the collective bargaining situation with an attitude of cooperation and a sincere desire to make it work. He should do his part to see that the discussion rests on facts, that it doesn't become emotional, and that it doesn't degenerate into two belligerent camps. If he is able to convince the union representatives (and thereby, the employees) that he wants to hear their grievances, and will honestly try to arrive at a fair settlement, he will have gone far toward improving employee relations. And if he is met with a similar spirit of cooperation on the part of the employee group, the union's visit to college will be beneficial to employees and management alike, as it should be.

How **STUDENT HEALTH** department functions at Rutgers

EDWARD HURTADO, M.D.

Director of Student Health
Rutgers University

EIGHTEEN YEARS AGO THE STUDENT body at Rutgers received medical services from one doctor, who was both health officer for the university and personal physician to the students. His duties included the examination of all freshmen during freshman week, the examination of students participating in organized athletics, and the supervision of their health during their participation in such athletic contests. He also acted as medical officer to the department of military science and tactics.

To discharge satisfactorily these various duties soon became a physical impossibility as student enrollment increased. The facilities of the college physician's office became inadequate, in both space and equipment, and the

need for medical assistants and for a student infirmary became obvious and compelling.

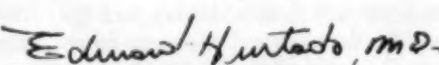
Back in 1929-30 if a student became ill and needed bed treatment, there was no provision for this at any of the rooming places on the campus. He had a bed to sleep in, of course, but there was no one to give him medicine as ordered by the doctor and no one to give him proper food at the proper time. Fraternity brothers were fine associates but poor nurses. There was no one to see whether the ailment was progressing favorably or had become serious. Frequently special treatment was necessary; none of the room-

ing houses was equipped to give this treatment. Lack of this special treatment would necessitate the transfer of the student to a hospital.

Hospital care has always been expensive, and few students could really afford it. In many instances they did their best in their own rooms or went home for the remainder of the treatment. Going home was a great waste of the student's time; it meant waiting in railway stations, possible spreading of infection to train companions, and, in many instances, aggravation of the ailment. Finally, the family physician would begin treatment all over again and often, to play safe and avoid recurrence, would want the student to stay at home two or three days longer than was considered absolutely necessary.

This form shows the volume and scope of student medical services.

RUTGERS UNIVERSITY Student Health Department												Date <u>July 1, 1947</u> to <u>June 15, 1948</u>	
PHYSICAL EXAMINATIONS			TREATMENTS	CONSULTATIONS	DRESSINGS	REDRESSINGS	HEALTH CERTIFICATES	X-RAYS	FLUOROSCOPE	BMR'S	EKG'S	CLINICAL LAB. TESTS	
COMPLETE	RECHECK	ATHLETIC											
1,705	157	1,393	6,853	4,257	670	511	58	905	55	19	105	5,737	
INOCULATIONS							VACC. SMALLPOX	T.B. TESTS	SCHICK TESTS	MENTAL HYGIENE INTERVIEWS	PHYSIO-THERAPY	NO. OF ADMISSIONS TO INFIRMARY	TOTAL
TETANUS	TYPHOID	DIPHTHERIA	INFLUENZA	RABIES	PERTUSSIS	SPECIAL							
491	447	108	168		1	1,125	23	1,773	626	410	3,103	178	30,878
<div style="display: flex; justify-content: space-between;"> <div> DAILY MONTHLY ANNUAL <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> </div> <div> ACTIVITY REPORT </div> </div>													


Edward Hurtado, M.D.,
Director of Student Health

For the student's welfare, as well as from the college physician's point of view, the establishment of an infirmary was of paramount importance. With commendable forethought, the university authorities acted favorably upon the recommendations made by the college physician. Suitable quarters were obtained at the north end of Pell Hall, a medical assistant to the college physician was appointed, nurses were hired, and a regular medical setup was



organized. It has been functioning, gradually growing, and constantly improving in both personnel and equipment, until it now has reached its present status as a first-class university infirmary where scientific, diversified and numerous medical services are given to the undergraduate and graduate student body. The student health department is supported by the university, and the student is not charged specifically for any service he might receive during his years at college.

The medical staff consists of a medical director on a full-time basis, four part-time physicians, one team physician, one part-time psychiatrist, one part-time clinical laboratory technician, one full-time physical therapist, five graduate nurses, and two clerical secretaries.

The infirmary is attractively furnished and is fireproof. The first floor is devoted to the outpatient department and consists of waiting rooms, consultation and treatment rooms, and main clerical office. A modern, shock-proof x-ray unit, with all the necessary x-ray equipment, is also found on this floor.

Bed patients are hospitalized and treated on the second floor, which is furnished with all necessary equipment for bedside care and is run by a staff of graduate nurses on a twenty-four hour basis. A complete and modern physical therapy department, clinical laboratories, basal metabolism and electrocardiography rooms are located in the sub-basement.

Medical ailments are properly cared for. No major surgery is done. Faculty and nonacademic personnel receive ad-

visory service and emergency treatment. The medical staff has all diagnostic facilities found in a general hospital. By constant observation and evaluation of new techniques or procedures found to be of real value to other first-class universities or colleges, we have been successful in keeping abreast of new developments in student health service.

A student health department fulfills an important service in university life. In most colleges and universities it has ceased to be merely a first-aid station; besides taking care of those actually ill and instituting preventable measures, it has become an agency for counseling and education.

The aim of our student health department is to diagnose and treat the illnesses and injuries that occur in the Rutgers student body, to prevent disease in any manner possible, to act in a medical advisory capacity in a wide range of health and personal problems, and to be an educational center for the students on the campus, so far as health matters are concerned.

BEFORE HE ENROLLS

Our student health department becomes interested in the student even before he actually is enrolled. When the prospective student addresses the admissions office, requesting information as to the prerequisites and qualifications necessary for registering, the candidate is furnished with a health certificate to be filled out by his family physician.

This medical certificate will be of use to the student health department in caring for the student's health needs while he is in residence at Rutgers. From this form we learn whom to notify in case of serious illness, as well as the medical history of the student and his family. We learn whether or not he has had any nervous illness, whether he is subject to fainting attacks, allergies, epilepsy and sensitivities to drugs. We also obtain the family physician's opinion as to the mental and physical abilities of the prospective student.

An important part of the student health department activities is the prevention of disease. One of the requirements for admission is that the prospective student be immunized against smallpox and diphtheria. These and all other immunization procedures are constantly being done by our staff.

Concurrent with his registration, the student is instructed to report to the

student health department for a complete physical examination. *This is a sine qua non prerequisite.* At this time he is asked to fill out a more detailed form, giving his own version of his past medical history, his health habits, and his military history, if any. Then the examining physicians check him thoroughly, giving him an eye, ear, nose and throat, chest, abdomen and extremities examination and a chest x-ray, blood test, and urinalysis. A dental checkup by a dentist is also required.

Thus, immediately after he is admitted to Rutgers University, the medical department has a fund of information about each student's health, which indirectly is of value to the patient in case of subsequent illness. All the accumulated records of each student are kept in a folder, which is brought from the files each time the student visits the infirmary and is made available to the doctor at the beginning of the consultation.

When a student becomes ill and reports to the infirmary, he is usually seen first by a graduate nurse, who takes his temperature, pulse and respiration and assigns him to the doctor on duty. After examining the patient, the doctor decides whether the treatment is to be administered by the nurse or by the doctor himself, or whether the patient is to be hospitalized or referred to the family physician or consultant.

Our practice never has been to use our clinical material for experimenta-



tion. Only medicines of recognized therapeutic value for known specific diseases are prescribed. The students are instructed to seek early consultations and treatment for minor illnesses while they are curable and before great pathology ensues.

There is close working relationship between the athletic and the medical departments. Before a student is permitted to participate in athletics, intramural or intercollegiate, he must report to the student health department,

where he is given a special athletic examination and obtains a card signed by the college physician, indicating that he is fit for the sport in which he is interested. In certain cases, as among the crew members, where the strain and stress are unusually high in regard to the cardiovascular system, the special athletic examination is supplemented by an electrocardiographic examination.

The genuine cooperation offered by the department of physical education has rendered our task in regard to athletic injuries far easier and more efficient than it would be otherwise. On instructions from the director of the physical education department, his staff promptly refers to the infirmary all cases of traumatic injuries necessitating x-ray diagnosis, as well as those of undue tension, fatigue or severe dysfunction needing medical attention or the use of physical therapy apparatus.

A physician is present at all regularly scheduled intercollegiate athletic events. The university physician, either directly or through the team physician, has the entire responsibility for determining whether a student is able to play or not and, of course, he takes no chance of injuring a student's health.

In modern times most colleges assume that the health of their students is of as much importance as the development of their intellect. Up until about twenty-five years ago, most colleges maintained only a small staff of physicians, who attended to minor medical matters only. If an illness called for more than routine medication or advice, the student was referred to a private physician or hospital or oftener received no treatment.

MEDICAL QUESTIONS ANSWERED

Excessive absence from classwork and delinquent attendance of students at classes, because of lack of medical treatment and advice, were causes of great concern to teachers or instructors. In many instances, special committees were appointed to look into the matter of absenteeism and to provide penalties. Instead of penalties, some other kind of program was needed: prompt and adequate medical care and advice.

Our objectives at the student health department of Rutgers are: (1) to combine and intelligently to practice preventive and curative medicine, specifically for the control of disease and the safety of the registered students

within the confines of the campus; (2) to detect and care for students' defects, injuries and illnesses; (3) to safeguard, in close cooperation with the physical education department, physical education activities and athletics; (4) to meet specific health problems of students (as mental health, eye health, tuberculosis, control of communicable diseases).

The medical advisory service is one of the most important functions of student health work. In reviewing students' calls to the infirmary on a single day, we cannot help but notice the kaleidoscopic variety of medical inquiries and answers given to students in our consulting offices. Young people in college are making inquiries



about their health and about medical problems as applied to society. It is desirable that these questions be answered by professionally qualified people. The student would often hesitate to discuss such problems with a physician in private practice but feels free to call upon the college doctor.

There is a never ending variety of subjects that include questions on nutrition, vitamins, diet and diet fads, premarital and sex problems. It is most gratifying to us to know that students are interested in such problems, that they have felt free to bring their inquiries to the health service, and that we have been able to supply them with information essential to their future welfare.

The functions of the student health department would not be complete without attention to the emotional life of the student and its intermingling with the other aspects of the student's medical problems. During the year it has been possible to procure the part-time services of a well trained psychiatrist who is available to students in need of advice on mental hygiene and health problems associated with nervous conditions or mental and environmental stresses. He works in close cooperation with the medical staff and

with the clinical psychologist in the dean of men's office.

Emotional problems frequently appear in the student's worry over possible tuberculosis, cardiovascular disease, diabetes or the anemias. Uncomplicated psychoneurosis will seriously hamper the efficiency of the student or will simulate organic pictures. Usually such cases are not detected until some strain in the student's experience produces symptoms of academic failure or an emotional breakdown. It is imperative that these cases be brought to the attention of the mental hygiene service early, in order that every possible assistance may be given to those for whom there is prospect of a satisfactory adjustment.

Students referred to the psychiatrist by deans, college faculty, and administrators are reassured of the physician-patient confidential relationship. In this field, no specific information is given to administration or faculty without the signed permission of the student or his parent.

A health examination is available to students whenever requested. Special examinations for all students entering athletics or physical education and for food handlers employed on the campus are provided. Unlimited free laboratory and x-ray examinations, electrocardiograms and all sorts of inoculations and immunity procedures are available to students, plus the use of a physical therapy department.

FOOD HANDLERS CHECKED

A policy for food handlers employed by the university has been initiated in the form of a complete physical examination, including laboratory tests (urinalysis, stool examination, nose and throat smears), chest x-rays for new employees, and periodic checkups every three months for all food handlers.

The accompanying form shows the volume and scope of medical services given to undergraduates and graduate students. The goal is broken down into various categories, making it easy to follow. There were 4200 students enrolled at the university's New Brunswick campus during the academic year 1947-48; all but a few of these called at the infirmary one or more times during the year, for a total of 30,878 visits.

The medical staff endeavors to carry out its work in a personal, quiet and dignified manner, with the highest of professional standards in mind.

Establishing essential relationships in

PURCHASING

CHARLES W. HAYES

Director of Purchases
Emory University

A PROCUREMENT OFFICIAL FUNCTIONS effectively through his personal contacts with people with whom he deals. He cannot operate in a vacuum but must operate with people—numerous people—in performing his functions. He must have certain definite characteristics and attributes of personality. Among the most important of these the following may be mentioned:

1. *Knowledge of Institution.* A purchasing agent must know in considerable detail the functions of the various departments of his institution, the work they are doing, the people performing the functions, and the special research projects underway. If he sees his job in the proper perspective, he should know as much about his institution and the people directing various departments as any other single individual.

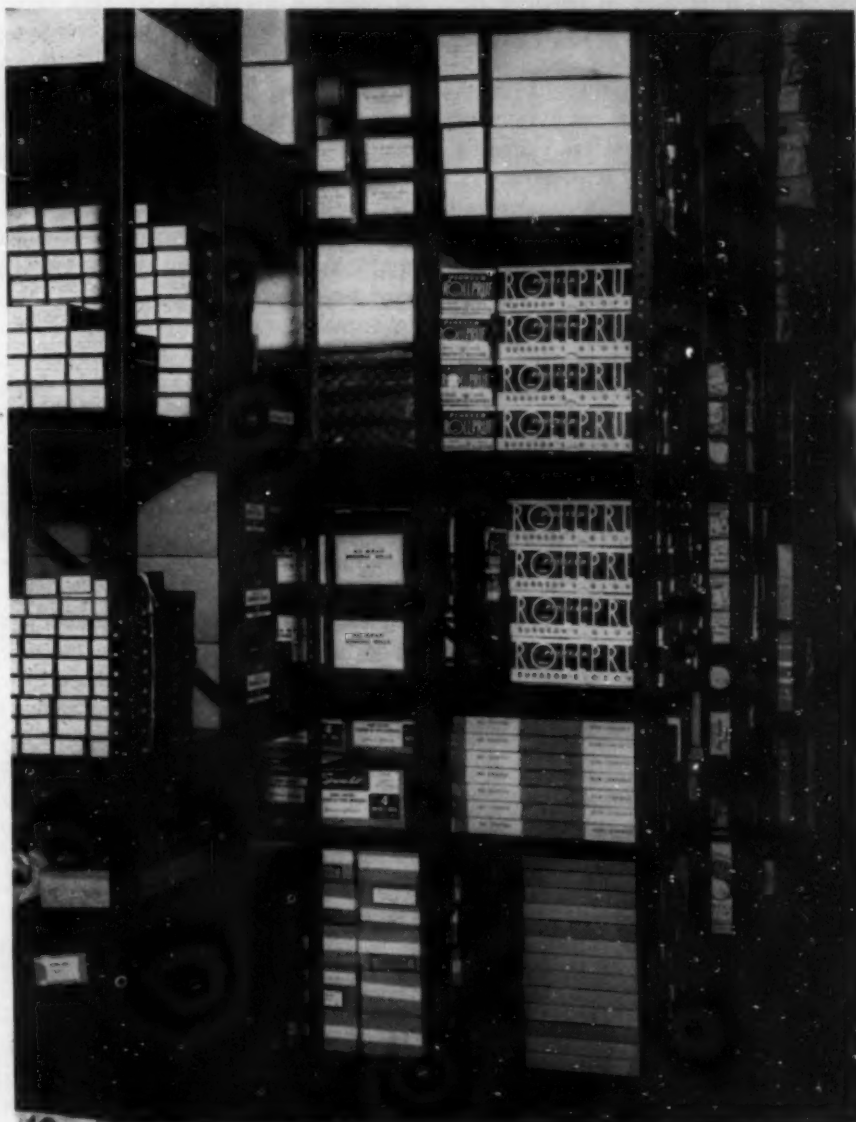
2. *Knowledge of Products He Is Buying.* A purchasing agent always should be acquiring information about products regularly stocked and about new and substitute materials, equipment and supplies. This knowledge is acquired as a continuous process from various sources, among the most important being salesmen, trade publications, direct mail advertising, contacts with fellow purchasing agents, and department heads of his own institution.

3. *Knowledge of Purchasing Functions.* A purchasing agent must possess knowledge and ability so that his department will function with a high degree of efficiency. Such knowledge is not inborn. It is acquired through constant study, thinking and planning. Some people, given the responsibility, develop to meet its challenge; others never do, despite the best of training and guidance by their superiors.

4. *Ability to Anticipate Requirements.* The day has passed when a procurement official can relax and consider that his only responsibility is to wait for requisitions from using depart-

ments. He must constantly check with them to anticipate their needs, to bring new products to their attention, to make them aware of special values, and to work out cooperatively with department heads their anticipated maximum and minimum requirements for definite future periods based upon current delivery promises and price quotations.

5. *Ability to Interpret Price Trends and Market Conditions.* If the purchasing agent uses wisely the information that comes to him, he should be in position to recommend variations as to timing and quantity of purchases in the several most important of the commodity groups with which he deals. He should not commit his institution



• Price alone should never be the paramount consideration in buying.

to unusually heavy forward purchases on his own judgment alone, however, but should seek advice of his superiors. Price forecasting is risky at best and decisions to tie up unusually large sums of money in inventories must be *shared* decisions.

6. *Ability to Negotiate Wisely With Vendors.* This trait is one of the most important of all attributes required for successful purchasing. The procurement official must keep tight control over actual negotiations with vendors as to the factors of price, quality, delivery and service. According to common law, a contract results when there are an offer by an authorized representative of the vendor and an acceptance by an authorized representative of the purchaser. The purchasing agent alone stands in this latter relationship. He must ensure that there is mutual assent between his institution and the vendor firm. In no other area of business is the old axiom "too many cooks spoil the broth" truer than in purchase negotiations.

Relationships of a purchasing agent are of two kinds primarily: (1) with members of his own institution or business; (2) with outsiders, primarily with vendors or vendor representatives.

RELATIONSHIPS WITH WORKERS

A purchasing agent should conceive of himself as an individual seeking to promote the procurement function in his own institution. This function consists primarily of keeping his institution supplied with materials, supplies and equipment necessary for the operation of its various divisions so that the institution's money will achieve the utmost in value for each dollar spent. He must, of course, be efficient in terms of knowledge and ability.

A man going into a new institution where he is not known by the people with whom he must work should become acquainted with them as quickly as possible and allow them to become acquainted with him and with his conception of the job. This may best be done, perhaps, by the issuance of a manual of purchasing procedure that is carefully worked out in terms of the local situation and the special problems confronting the institution. He must seek to dispel the suspicions that will inevitably accrue to a new official in such a position.

If he is organizing a centralized department where purchasing responsibilities have previously been decentralized, he must work with extreme care

in order not to create so much ill will that the institution will be harmed instead of helped by his coming as an executive. On the other hand, he must take over fairly promptly the purchasing function in its entirety. To string along with a partly centralized system and a partly decentralized system over a period of months or years will create more problems than will his complete assumption of the functions fairly early in his tenure.

The purchasing agent on his own volition cannot establish a strong centralized purchasing department. His superiors must back him with adequate authority, with a title, and with continuing counsel and advice so that department heads in his own institution and outsiders will recognize easily that he is in fact the representative of the institution in procurement problems and that he is the only authorized representative. From that point on the purchasing agent must sell himself and his office to his fellow workers. He must be understanding of their feelings in taking from them a function that most of them enjoy because of the commonly accepted ego satisfaction of spending somebody else's money and of giving a salesman an order.

If the purchasing agent can survive the initial period of from three to six months without making any major mistakes he will by then, if he has the right qualifications for the job, probably have many more people in the organization supporting him than are opposed to him.

UNAUTHORIZED PURCHASES

We must emphasize that the purchasing agent must not allow unauthorized purchases to be made. Such a practice develops in a rather insidious manner. The procurement official is busy when an immediate request must be met; he takes the line of least resistance and tells the person to make the minor purchase. The department head on the next occasion will make a larger purchase and, before the purchasing agent knows it, he is purchasing for his department as a matter of course, regardless of the amount of expenditures involved.

The purchasing agent has a difficult time in stopping this practice once started. It should never be allowed to start. He can work with vendors by informing them that purchases made for his institution must be authorized by him or his office. He must be open to advice and receptive to suggestions,

but the final responsibility for procurement lies with him.

A purchasing agent must recognize that many times a small item, trivial in terms of dollars, is extremely important to the proper functioning of a department and must be obtained without delay, regardless of whether or not the department should have anticipated the need. He must procure the item as quickly and as economically as possible. Often he will expend more effort in getting such an item, small in value, than he will in placing an order for a large sum. If he neglects the minor items, however, he is neglecting a large part of his job and is completely disregarding the service function of his organization.

The procurement officer will be able to make cash savings for his institution in terms of the large purchases and will be able to obtain good service from vendors on small purchases if he is controlling *all* the purchases. If he is not, neither of these results can be achieved.

The purchasing agent should seek committee guidance on difficult problems, such as problems of standardization. A committee is an impersonal sort of thing and membership on it implies sharing the responsibility for its decisions. Often a committee can study a problem and adopt a solution that will be fairly satisfactory to everyone concerned, whereas no single individual member of the committee could work out a solution that would satisfy all the others.

The purchasing agent, on the other hand, should not be afraid to make decisions alone. Many times he must make them quickly over the telephone or without an opportunity to consult with a group of people who may be primarily or secondarily concerned. Committees called together to consider every purchase would be wasteful of the time of many people. They should be used only when major changes of commodities, procedures or policies are being considered.

RELATIONSHIPS WITH SUPPLIERS

The purchasing agent is developing adequate and reliable sources of supply for his institution each time he talks to a salesman. He is not seeking merely to place *one* order and to get *one* delivery, but he is seeking to develop a source that can be depended upon for the future. The salesman who expects to receive an order on each call he makes is not working according to a

philosophy that will be most productive to him in the long run. The purchasing agent, in turn, who talks to salesmen only in terms of an immediate need as represented by a requisition on his desk is also functioning incorrectly.

A good source of supply is as important to a purchasing agent as a good customer is important to a sales manager. We are not advocating that we should become bound by one source of supply for each item that we purchase. Such a procedure is extremely shortsighted. On the other hand, we should seek to develop a carefully chosen number of the best possible sources for each important commodity that we are purchasing or will purchase in the future and then allow each of these selected sources of supply to bid. This is particularly important for large items where installation and service are major factors.

Price alone should never be the paramount consideration of a purchasing agent. The questions of quality, service, quantity, required delivery date, and reliability of the vendor should be assessed before vendors are requested to quote, and then the best possible price arrangement should be accepted by the purchasing agent. If the prices are all too high they should be rejected by the purchasing agent.

The purchasing agent should be extremely careful in his choices of the standard sources of supply for each commodity. His negotiations with suppliers should be open and above board, and he should demand the same sort of treatment from them. He should not allow unwarranted demands by his using departments to be made upon suppliers for unusual service or guarantees. The purchasing agent must know trade practices and customs and seek to see that his institution is operating in terms of them.

Supercritical tolerances of quality should be avoided, since they inevitably cause more expense to the seller who must protect himself by quoting higher prices. There is no such thing as quality *versus* price purchasing. We

are buying for the quality that is needed to meet a specific situation.

Occasionally the purchasing agent will be faced with the problem of requests by vendors to revise their quotation. If he is satisfied that an honest mistake has been made in calculations by the vendor, he should grant such a request and should grant it to all who have made a quotation. He should, however, not accede to such a request if he feels that the vendor did not give him the best possible price in the beginning. If the purchasing agent adopts such a course and adheres to it, he will soon find that he is receiving the best possible prices initially from vendors. If he does not adopt this method, he will never be sure that he is getting the best possible price.

The purchasing agent must learn early in his career to assess the worth of the salesmen who visit him. Much can be learned from experienced, capable salesmen who are seeking to develop good customers; little can be learned from a salesman who is merely seeking to get an order.

Purchasing agents must regulate their work so that they are readily available to salesmen and to department heads of their own institution. A closed door is a convenience to the purchasing agent in allowing him to clear his desk, but it is a definite barrier to quick and easy relationships with salesmen and his co-workers. He must learn to work at odd free times at his desk and be easily available for interviews.

The salesman who is seeking to sell a product that the purchasing agent knows he will not be interested in should be so advised in a courteous manner so that he can spend his time elsewhere with more success. Salesmen should be advised as to the frequency of their calls so that the time of neither the purchasing agent nor the salesman will be wasted.

The purchasing agent should be particularly careful to keep a courteous, friendly, yet impersonal, relationship with salesmen. He should not in any way become obligated to a particular

salesman or to a vendor firm. He should not accept *any* gifts or entertainment of any considerable value from salesmen. It should be a firm policy that no one in the organization should be allowed to accept such gifts or expensive entertainment.

Occasionally a purchasing agent is asked to purchase commodities from a particular firm on the basis of some reciprocal relationship. This practice should be discouraged.

SUMMARY

There is nothing that can hurt an institution more than an individual in a position of responsibility who has a mind closed to new developments in his field. The converse of this statement is equally true. An individual who is swayed by every new concept that he meets may also be a detriment to his institution. The procurement officer must learn to evaluate information given to him by department heads and by salesmen in terms of their own experience and to check any statements or requests that are made that appear to be unreasonable or inaccurate.

The job of purchasing is interesting work; it is also demanding. It requires the best that a person has and he cannot take the job on a routine basis and succeed with it. He must be alert to see possibilities; he must have imagination and must be able to conceive of shifting functions or equipment from one place to another as the need arises. He must also have a practical mind when it comes to repairs and construction projects and must be able to deal with the trades, such as plumbers, brick layers and masons, in their own language. In a university he must have a keen conception of the attitudes peculiar to professors and department heads.

He will never learn all the answers and should never claim to know all the answers. He can, however, contribute immeasurably to the successful operation of his institution if he functions in a professional manner instead of as a mere order placer or high-class clerk.

The Campus Goes Modern

The April issue will feature a portfolio of college architecture, with an introduction by Mies van der Rohe. From various campuses in the United States and Canada, one choice example of modern architecture has been selected: a classroom building, science hall, library, fine arts building and student club.



BUSINESS AND EDUCATION COMBINED

A NEW BUSINESS ADMINISTRATION-education building, costing approximately \$401,000, is under construction on the campus of Montana State University at Missoula. Work on the building was started last summer, and it will be ready for occupancy in July.

The three-story structure of reinforced concrete faced with tapestry brick measures 164½ by 54 feet and has 26,000 square feet of floor space. The first and third floors will be occupied by the school of business administration and will include such features as an accounting laboratory equipped with the various business administration machines, and a statistics laboratory that will be used both for training of students and for operation of a bureau of business research.

The school of education will occupy the second floor and will have a curriculum laboratory containing collections of all types of materials related to the planning and operation of schools. This laboratory will also serve as a visual aids room that can be darkened for showing moving pictures.

A one-way vision screen will serve as a wall between two of the classrooms on the second floor so that education students in one class may observe dem-

T. G. SWEARINGEN

Maintenance Engineer
Montana State University

onstrations in the next room without distracting the activities of the other group. Four classrooms on this floor will accommodate approximately 200 students. One room will serve as a measurements and research laboratory and will contain a collection of tests and materials relevant to statistical technics.

Main corridors in the new building run off-center of each floor, thereby allowing a wider space on the north side for classrooms and a smaller area on the south side for offices. The finished building will be class A fire resistant, and steam heat with direct radiation and tempered air conditioning will be employed.

Interior partitions are of gypsum tile and acoustical plaster, and all classrooms and corridors are finished with the same materials on walls and ceilings. The acoustical plaster is made from hydrated mica from Libby, Mont.

Steel sash encase plate glass windows, and glass brick is used on the ends of the building. South side windows are of special glass to reflect light

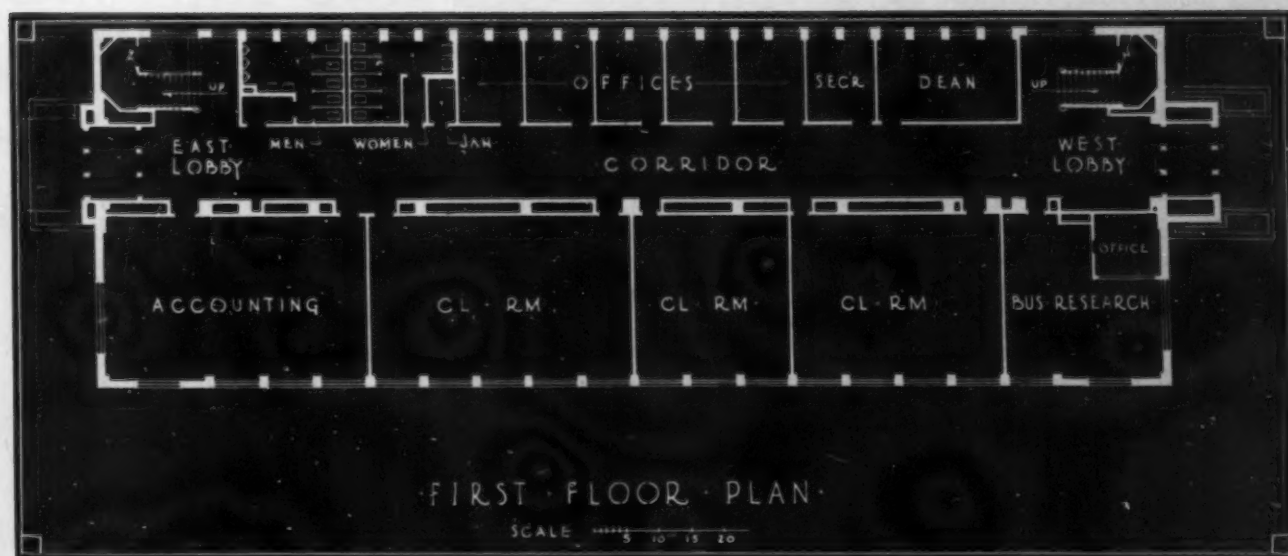
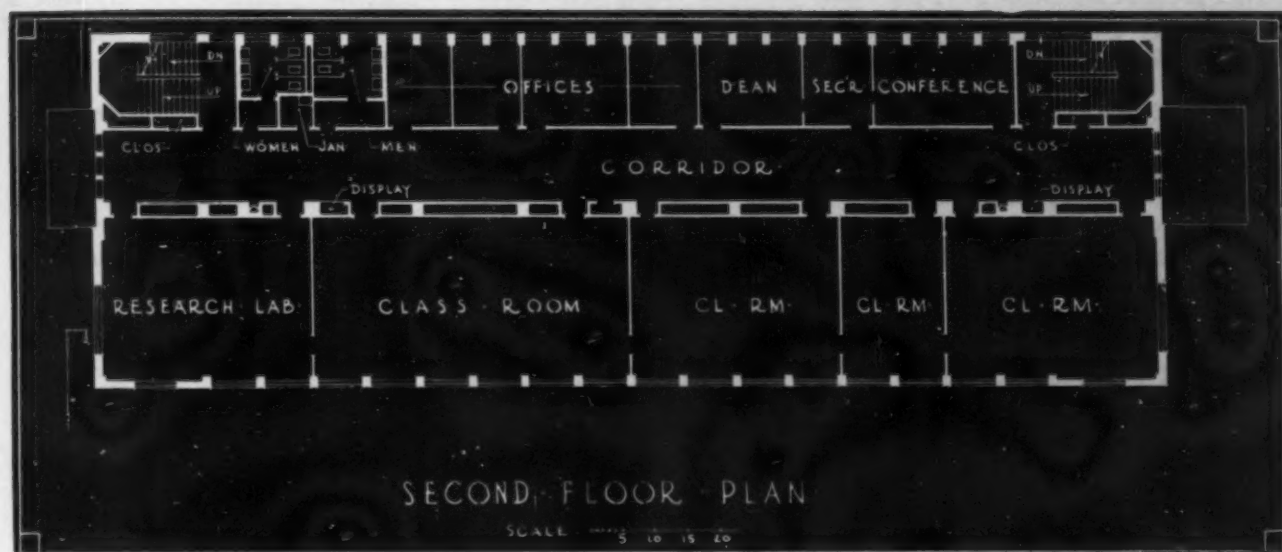
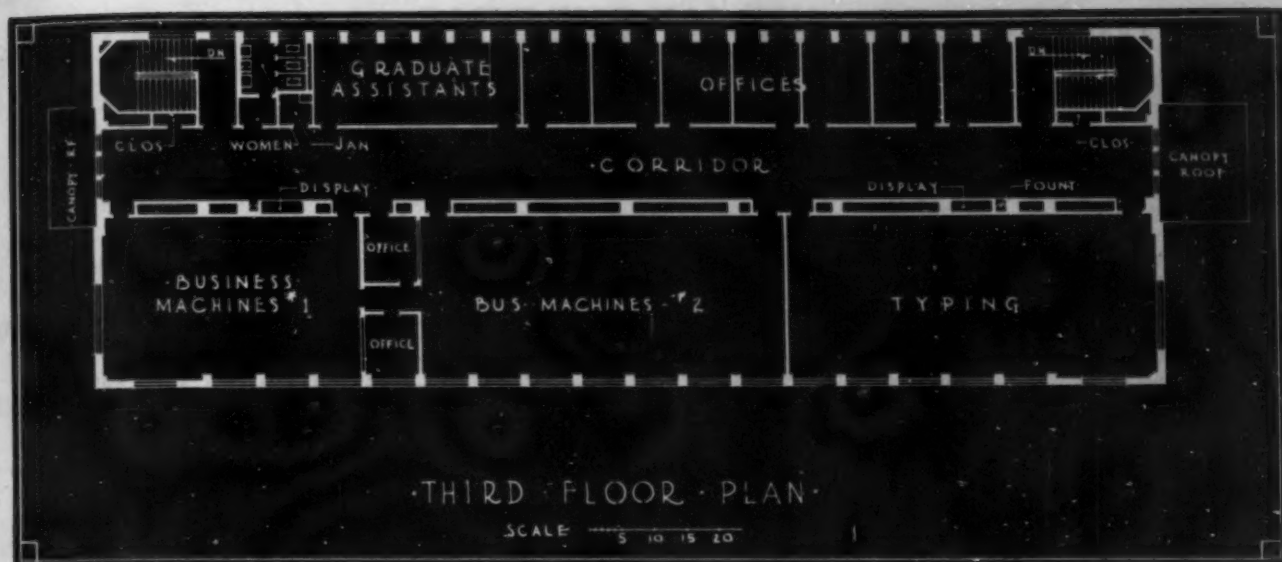
and heat. Fluorescent lighting will be installed in all the rooms. Floors and stairways have a concrete foundation, and hallways and stairways are surfaced with terrazzo. Classrooms and offices are finished with mastic tile flooring.

Special wiring is being installed in some of the business administration classrooms so that electrical outlets will be available for adequate lighting for students using office machines at individual desks.

The total bid price of the brick structure was \$401,133. Of this amount, \$323,158 is for general construction, \$53,980 for plumbing, and \$23,995 for electrical installation.

The general architecture, type of construction, and materials of the new building conform with other buildings on the campus. However, this structure has been designed with a flat roof in order to obtain maximum space for money available. All unnecessary architectural features have been eliminated, and the building with its large windows and streamlined effect is of modern design.

The consulting architects for the new structure are Bebb and Jones of Seattle; Fred Brinkman, Kalispell, Mont., is the general architect.



THE COLLEGE UNION BUILDING

offers a substitute for home and a laboratory for living

BROADLY SPEAKING, I WOULD LIST the functions of a college union as follows: (1) the union is a substitute for home; (2) the union must provide education in living as opposed to education in technics; (3) the union must provide for student leisure.

These are basic needs. They exist for students regardless of whether they are few or many in number. If this is so, then the satisfaction of these needs is the business of every college, both large and small, if it is to perform its educational job.

As a result of the industrial revolution of the last century, education, and indeed life itself, has tended to become impersonal and mechanical. This is the natural consequence of an unconscious worship of the machine. As Lewis Mumford points out in his "Technics and Civilization," we are suffering from our embrace of "the technics directed toward the service of life."

I realize that students from the small liberal arts colleges acquire a great deal of knowledge on subjects that one would expect to find in the curriculums of such a college, but knowledge itself does not necessarily imply the ability to use it. It is possible for the students to develop a life philosophy through the medium of the college union, or, if not, at least to acquire a workable way of life.

Let us examine what a typical college has to offer as substitutes for the college union's home, educational and entertainment programs. In examining the equivalency of substitutes that are offered, I believe a safe yardstick would be to pose the question, "Will the student accept the substitute offered without being forced, and will the student therefore be in a frame of mind to absorb the values that might better be provided in a college union?"

First, consider the substitute the liberal arts college offers for home. No doubt, in the best colleges the residence hall, or house arrangements, is calculated to produce a home atmosphere and, inasmuch as it succeeds, it approaches one of the ideals of the college union. However, the student does not own the residence hall—at most, he can be said to own

MICHAEL M. HARE

Hare and Elder, Architects
New York City

his own room. In the college union it is possible to integrate the component parts of a well rounded program that will have an appeal for the student, owing in considerable part to his sense of ownership of the union.

In the very small college it well may be that the houses of faculty members offer in some sense a home substitute. But it is apparent that, on the one hand, the faculty members must be permitted some home life of their own, and, on the other hand, no matter how stimulating and home-like such a house may be, it is not the students'.

FEEL PRIDE IN OWNERSHIP

College unions are properly run by the students themselves and frequently are paid for entirely by the students, with the result that they not only feel the pride of ownership but in the union also meet faculty members on a basis of equality more conducive to a proper atmosphere.

Second, let us consider the opportunity in the liberal arts college for education in living. To my mind, academic courses, no matter how plentiful and comprehensive in the arts and in philosophy, never can do the whole job because there is no laboratory available. That is when the college union must step in to fill a definite gap. To be sure, knowledge must be acquired in proper courses on these subjects, but how to use it is best taught in the college union. This implies, of course, that the union staff have standing on the faculty, be of high caliber, and work on a program wider in scope than merely servicing the building.

It is pretty difficult for some to assess both the values and fallacies in, let us say, the philosophy of Karl Marx, because their experience in putting this philosophy into effect is negligible and their knowledge of its practice, hearsay. In the union, those who are entranced by this philosophical flower of the 19th century would have an opportunity to see its pitfalls as they try to make it work in the

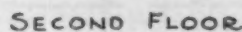
government of their own institution.

Seminars connected with academic courses to discuss the solution to various problems of life never can be quite as effective in some ways as the meetings that students attend in the union, where they are faced with the necessity of putting their ideas into concrete form and carrying them out in terms of an actual social and service program for themselves and other members of the college community. The educational program of a union never should be handed down from on high by the director; its very value is that it is a cooperative endeavor, putting into effect knowledge acquired often in the academic courses.

Comparatively few students will patronize a series of courses in philosophy of their own accord, but many will find themselves in effect doing so in a union because it is part of life. In the case of the fine arts, no doubt many students will take one or more courses in these subjects, but how many will hazard a try at actually practicing the arts, and how many will go to exhibitions sponsored by the fine arts department in the fine arts building? In the union, on the other hand, there should be an arts and crafts laboratory, if the staff budget permits it, which will be found to have an appeal to many students that otherwise would not fit easily into the community life.

Similarly, changing art exhibitions incorporated in the lobbies of the college union building will engage the attention of virtually all students, because the exhibitions are there as an everyday part of their life, and a visit to them is not thought of as an esoteric venture. Again, it should be apparent that students may well absorb more of the arts unknowingly during their participation in the union program than they ever would when the arts are offered through the regular curriculum.

Last, let us consider the substitute that the college union offers for the entertainment that would be found in a small college town, or a large one for that matter, where no union exists. I doubt if there would be much disagreement that, under such circumstances, students, unless forcibly restrained, will



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RESIDENCE HALL for 100 men at Trinity College

stresses economy but not as a cloak for deficiencies in design

LIKE EVERY OTHER COLLEGE IN THE country, Trinity has been struggling with an enormous postwar enrollment compared to its previous size of 525. Its location in the city of Hartford, Conn., has naturally brought many local students who live at home both to the regular courses and to extension. But its tradition has always been that of the independent liberal arts college in which contacts within the student body and between faculty and students rest in good measure upon a preponderantly resident population.

President Keith Funston and the trustees are unified in their desire to perpetuate this source of educational strength despite increased numbers.

Their aim is living quarters for 80 per cent of the undergraduate body, a goal that applies to the anticipated permanent average enrollment of 650 rather than to the present exaggerated size of about 900.

Nevertheless, the increase in classes brought about the situation that graduating resident seniors were far fewer in number than entering freshmen who needed rooms on campus. A new residence hall for 100 men was therefore mandatory.

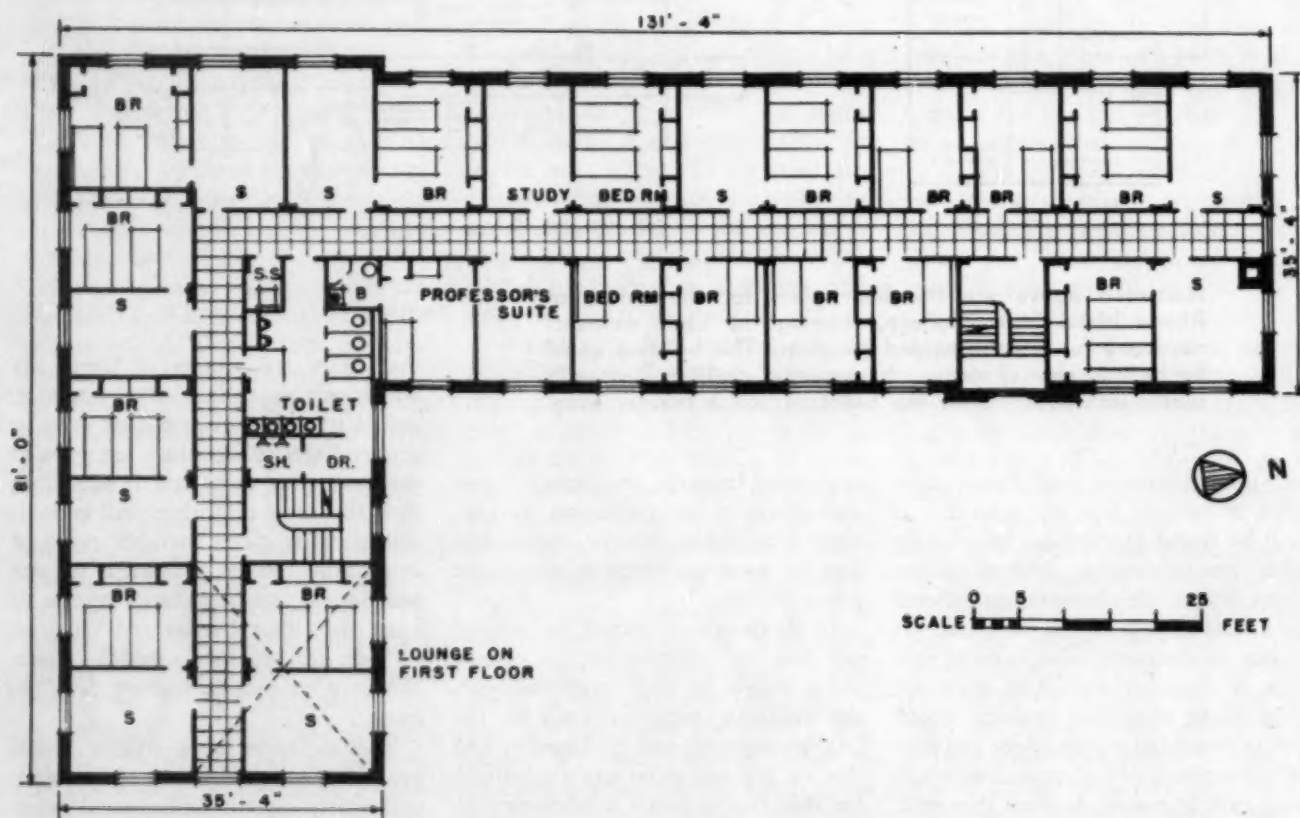
In undertaking erection of the new residence hall, economy was a prime consideration. At the same time, it was realized that any college building, however fervently it is proclaimed to be

R. B. O'CONNOR

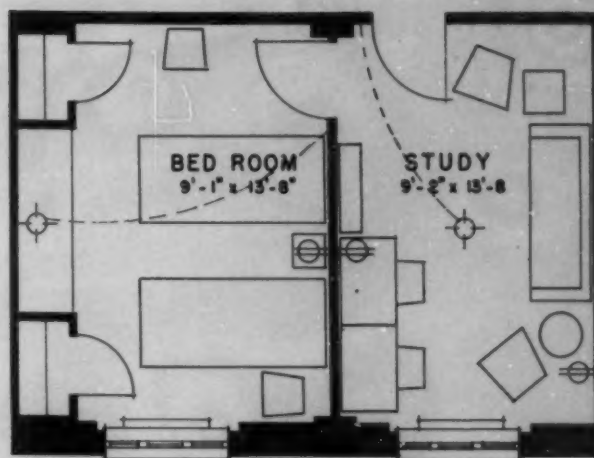
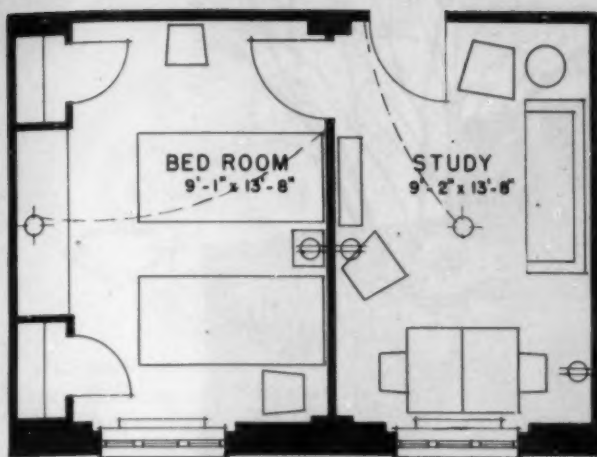
O'Connor and Kilham, Architects
New York

temporary, lasts as long as it holds together. So the trustees determined that economy should not be a cloak for deficiencies in design that would really be detrimental over the long run, either in maintenance costs or in appearance. Every effort, therefore, was made to weigh each expenditure in terms of present savings *versus* long-range desirability.

Fundamental considerations were: (1) that the building should be completely fireproof; (2) that the accom-



TYPICAL FLOOR PLAN



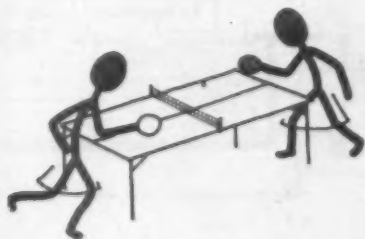
ALTERNATE FURNITURE ARRANGEMENTS FOR TYPICAL TWO STUDENT SUITE

SCALE 0 5 15 FEET

modations, while not luxurious, should be adequate by post-emergency standards, and (3) that the building should fit into the campus atmosphere despite every reasonable saving in architectural detail.

During 1947 four identical residence halls were built at the University of Vermont, with the simplest of plans and with a prefabricated concrete wall system that resulted in low unit costs. Only one dormitory was contemplated at Trinity, and the Vermont plan was felt to be too uncompromising to fit with the existing Gothic design. But after turning the I-shaped plan typical of the Vermont buildings into an "L" and adjusting the mass to fit the practical requirements, a composition resulted that seemed to fit the existing architecture.

Brick cavity walls and limestone trim with a reinforced concrete frame were chosen to replace the brownstone and Ohio sandstone materials of the original campus, and a frankly decorative but inexpensive crenelation treatment around the flat roofed four-story residence hall ties in satisfactorily with



the old three-story structure and pitched roofs of the earlier buildings.

Interior partitions are concrete block throughout except in the toilet rooms,

There are twenty-six single rooms and forty two-room, two-man suites. On each floor a suite with private bath is provided for instructors.

where ceramic tile is used on walls and floors, and in the first floor lounge, where a plaster finish is utilized. These block walls are painted with cement paint in a carefully varied palette of colors. Floors are of asphalt tile to harmonize, and corridors have acoustical tile ceilings cemented to the concrete slabs.

Windows have high quality aluminum casements for low maintenance, and the convactor radiators are placed in the window recesses, together with their exposed supply and return risers, to minimize installation cost.

No elevator was installed as an elevator was regarded as unnecessary in a building of this height. A large room for the storage of bags, which now have largely displaced trunks for student use, is provided in the basement.

The rooms are arranged as single rooms or two-room, two-man suites. There are twenty-six of the former and forty of the latter. On each floor except the first, one suite next to the central toilet rooms has a private bath. These suites are convenient for the use of the instructors.

The arrangement of doors and of electric outlets in all rooms was determined only after careful studies were made at large scale of possible variations in furniture layouts. When every inch of space and every dollar of expenditure has to be considered, the desirability of these rooms for continued use through many years will depend in large measure on their at-

tractiveness to the student. Following the decision to eliminate all plastering in rooms and corridors, the small factors of color and convenience of furniture layout assumed even greater than normal importance.

The interior doors are solid core wood doors with $\frac{1}{4}$ inch surface



veneers for serviceability except at the stairs, where self-closing, hollow metal fire doors were specified. Hardware is based on latch bolts from corridors to rooms actuated by keys on the corridor side. Bedroom closets have knob latches.

Switches controlling all ceiling lights and wall lights (in bedrooms) were placed by doors in the belief that students are more likely to extinguish their lights at this point when leaving rooms than they are to turn off each of several local switches. The latter they are reasonably certain not to do.

Cubic foot cost of the new building, which was completed last fall, including grading and planting, architectural fee, and furnishing, complete, was about \$1.35. This is approximately \$3460 per bed.

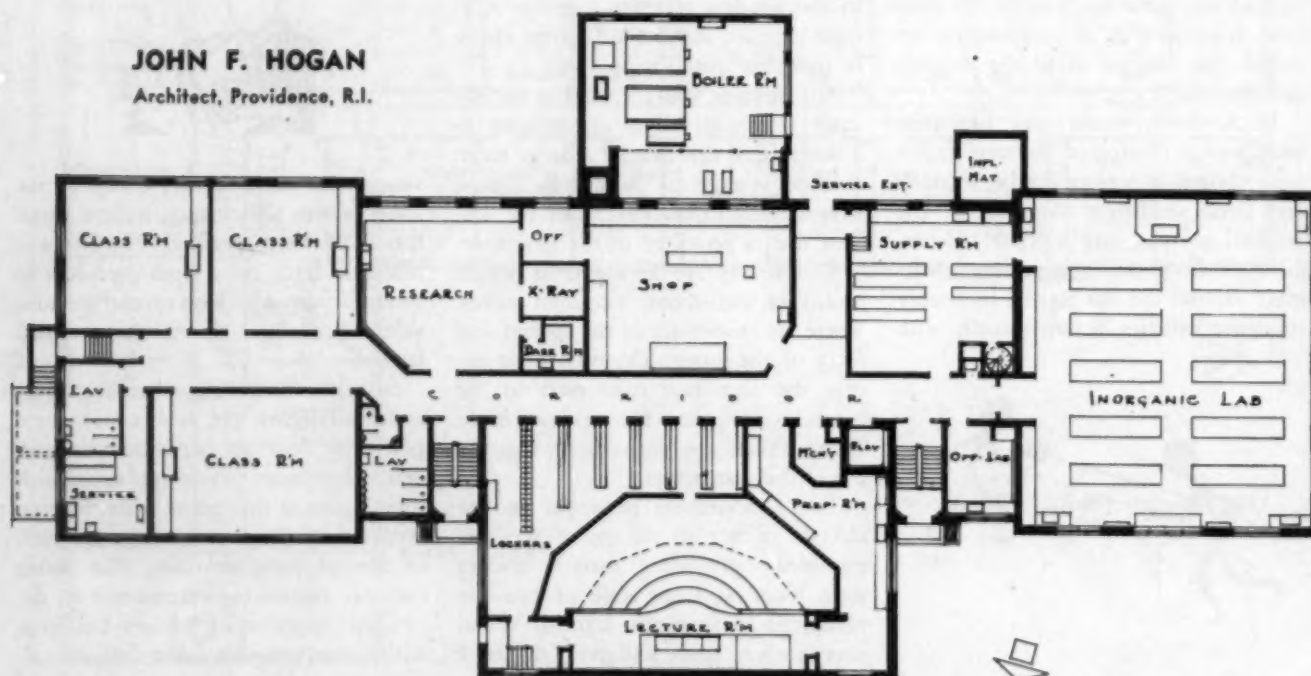


Lorbert Studios

Providence College opens **SCIENCE BUILDING**

with many special features, including FM station, auditorium, two exits per laboratory, custom made furniture and special lighting fixtures

JOHN F. HOGAN
Architect, Providence, R.I.



GROUND FLOOR PLAN

DETAILS OF CONSTRUCTION



THE NEW ALBERTUS MAGNUS Science Building at Providence College, Providence, R.I., conducted by the Dominican Fathers of St. Joseph's Province, was occupied last September. It houses the departments of biology, chemistry and physics, with accommodations for 321 students in biology, 644 in chemistry, and 134 in physics. These figures are based on the number of students that can be taken care of at one class hour.

The building occupies a spacious plot of ground to the south of the main drive approaching Harkins Hall, the central building of the college. Situated well back from the driveway and surrounded by a terraced lawn, it harmonizes with Harkins Hall in color and material, although the design indicates the building's function as a modern scientific laboratory.

Large bands of practically uninterrupted windows encircle the building at each floor, providing a maximum of natural illumination and ventilation, while vertical strips of glass blocks in the stairwells add a modern touch to

CONSTRUCTION: Foundations, floor and roof slabs, reinforced concrete on steel frame. Exterior walls, brick backed with cinder blocks or brick. Interior partitions, cinder blocks. Doors, windows and frames, wood. Stairs, steel construction with steel safety treads. All doors and frames entering stair halls, kalamein.

FLOORING: In chemistry section, floors have fiberized mastic floor covering. In auditorium and locker room, concrete; in lavatories and stair halls, terrazzo. Elsewhere, asphalt tile.

WALLS: Glazed terra cotta, except in radio section and soundproof rooms of physics department, where walls are faced with acoustical tile. Darkroom walls, plaster, painted black. Glazed terra cotta is cream colored in most rooms, light green in corridors and certain rooms. Bases, black or dark green.

CEILING: Rubbed concrete, except in auditorium, radio section, and soundproof rooms of physics department, where acoustical tile is used. Unpainted concrete was determined to be the most slightly and economical in the presence of chemical fumes. Acoustical material carried down 3 feet on walls of auditorium to catch sound waves bounding off ceiling.

LIGHTING: In biology and physics departments, fluorescent; enclosed fixtures with special lenses in chemistry department because of chemical fumes. Special fixtures for lighting blackboards in auditorium and certain classrooms.

HEATING: Low pressure steam, oil burning boilers. Each room, thermostat controlled. Radiators are convectors where heat alone is required; unit ventilators where fresh air is required.

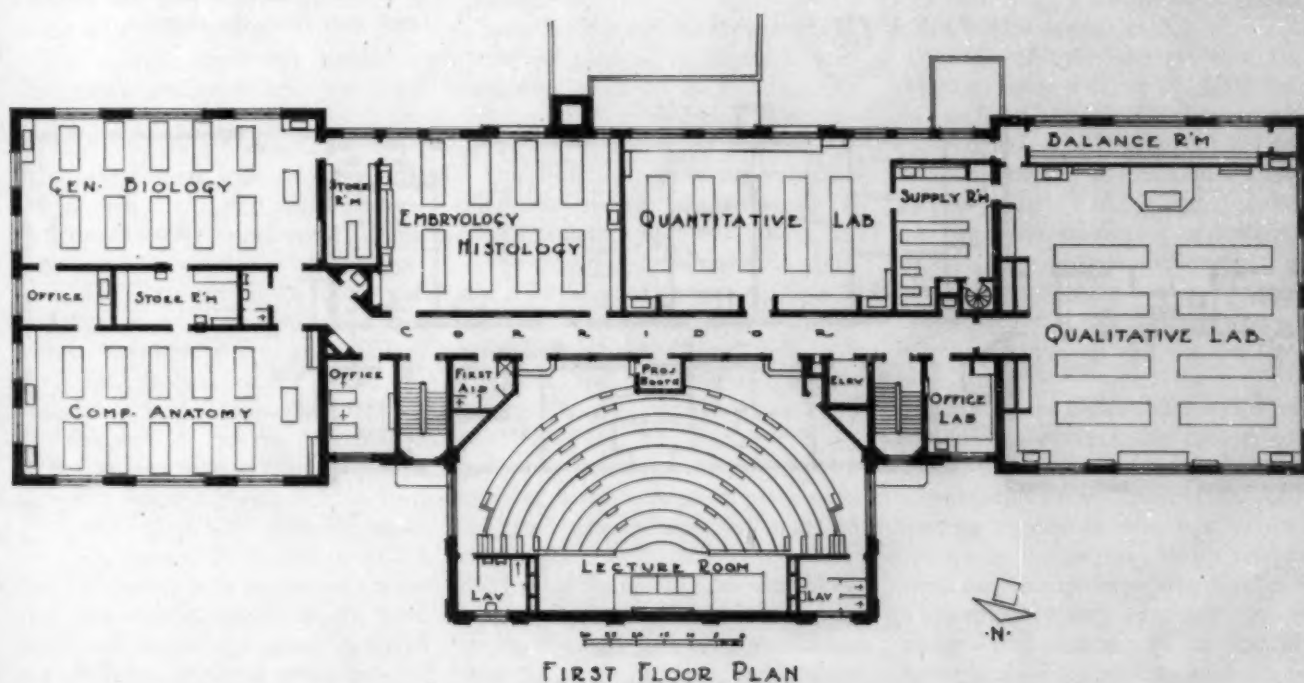
PIPING: For all systems except lighting, exposed for ease of maintenance. Piping from fixtures handling chemicals, acid-proof.

VENTILATION: For all rooms containing hoods, through the hoods. General biology and comparative anatomy laboratories also ventilated. Except in a few cases, fans located in or near room ventilated. Exhaust ducts, asbestos board.

ELEVATOR: Push button type, self-leveling. Has every safety device.

GENERAL: Toilet partitions, marble. Hoods, asbestos on treated steel frames; table tops, acid resisting soapstone. Auditorium chairs, secured to risers for ease in cleaning. Ground floor, placed on earth with pipes below that level in trenches with removable covers. Transformer vault has no direct connection with building. Rooms used in summer months have screen doors for interior openings. Doors have kick plates on each side. About half of windows throughout building, fixed, thereby saving some expense for hardware.

COSTS: General, plumbing, heating and electrical contracts, \$1,055,091.41, or \$1.236, per cubic foot; architect's fee, cost of land and grading, laboratory tables and other furniture, and certain cabinets not included; hoods, electric fixtures, and certain laboratory tables included.



the exterior and provide an abundance of light for the stairs. The building has four stories in the central section and three in the end wings.

Projecting from the central section of the building is an auditorium or lecture hall, two stories in height and having a capacity of 265 seats, arranged in semicircular rows. It affords facilities for demonstration experiments and motion picture and lantern slide projection in the most modern fireproof manner and will be a great convenience in teaching large freshmen groups in science and for extra-curricular meetings. With the latter purpose in mind, an entrance directly to the auditorium has been provided at ground level.

In general, the plan of the building places the biology department in the left wing, the chemistry department

in the right wing, and the physics department in the front center section on the second floor and the entire third floor. The rear center section is occupied by the biology and chemistry departments. The accompanying drawings indicate the plan in detail.

Convenience of instruction, flexibility of arrangement, ease and economy of maintenance, safety, health and provisions for future expansion were the objectives of the planning and have been reasonably well attained in the light of present knowledge of the requirements for future expansion.

Among features of special interest are the following:

Each laboratory has two means of exit in case of emergency.

A chalkboard and demonstration table on a raised platform have been provided in most laboratories for the

instruction of students and explanation of experiments.

Hoods are built-in and provide the only means of ventilation for the laboratories, fresh air being furnished through unit ventilators.

Laboratory furniture was custom made to suit the particular requirements of the student in each laboratory.

In chemistry research laboratories, a stone trough extends along one wall for its entire length, with all services also provided on that wall. This permits great flexibility in the laboratory.

A special writing shelf independent of the balance shelf has been provided in all balance rooms.

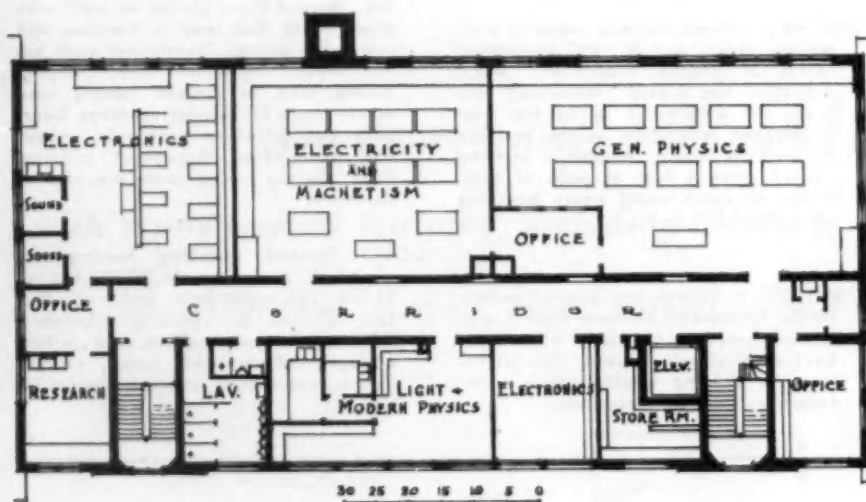
Chemistry supply rooms are located in a tier and are connected by a dumbwaiter and spiral staircase. In these rooms, as well as in stock rooms in the biology and physics departments, the shelving has been designed so as to provide a particular location for each item.

Two soundproof rooms are provided for individual work in electronics.

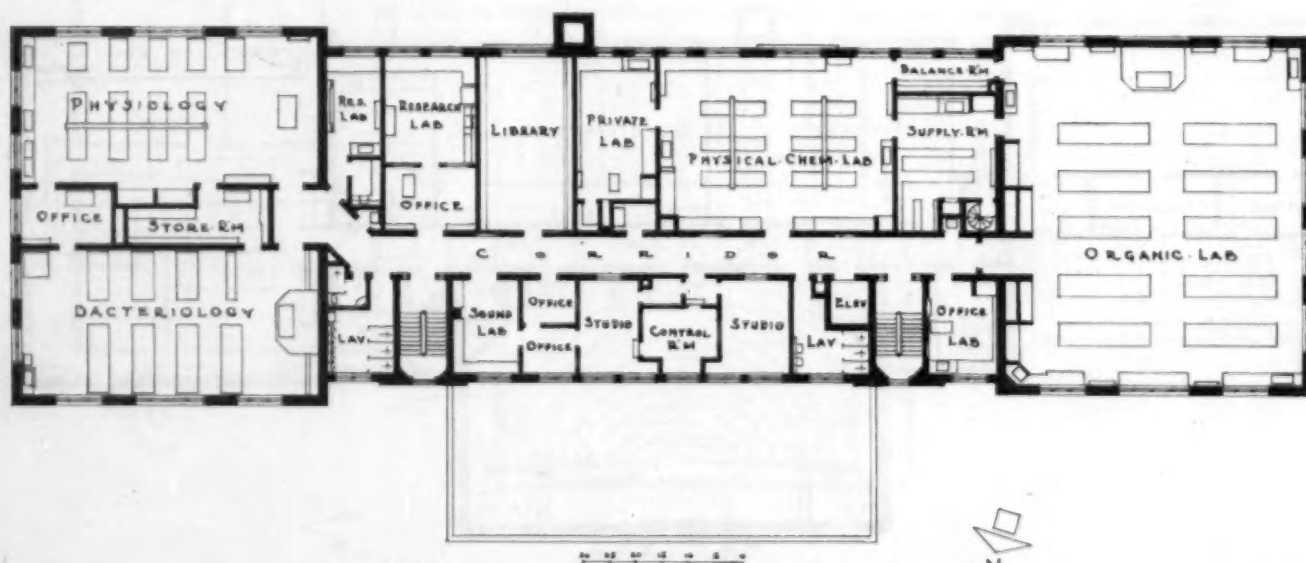
A thoroughly equipped FM broadcasting station for the broadcasting of programs and the education of students is soon to be put into operation.

A generous number of illuminated display cabinets have been provided in the corridors for the exhibition of material of interest and value to the students. These display cabinets have mirror backs and sides.

The boiler room and inflammable material room are entirely separated from the building in that they are entered only from the exterior.



THIRD FLOOR PLAN



SECOND FLOOR PLAN

Faculty and students have good opportunity to talk things over while working side by side.



THIS IS THE HALL THAT STUDENTS BUILT

TO THE CASUAL OBSERVER WILMINGTON College, a 77 year old Quaker college in southern Ohio, is just a typical small Midwestern educational institution, but what the college with its 600 students and fifty faculty members is doing is far from typical.

The college desperately needed a new men's residence hall, yet there wasn't enough money available to pay present high construction costs. Even by cutting corners with the school doing its own contracting, using its own staff members for engineering consultation, and simplifying whenever possible, the architect figured that the building with accommodations for eighty-five would cost a minimum of \$160,000. A look at the books revealed that the college might scrape up half that amount, but not \$160,000.

The answer was to ask the college family to build it itself. In mid-April 1948 the college's 33 year old president, Dr. Samuel D. Marble, went before his student body and posed a question few administrators would have dared ask, but the students accepted his challenge with an enthusiasm of

IRA GOSSETT HAWK

Director of Public Relations
Wilmington College

which even he himself had never dreamed.

Every student and faculty member in the school pledged to donate at least three days' work on the building; the majority of them pledged a minimum of from 50 to 100 hours of work.

The building, under construction since last spring, is a two-story L-shaped structure with each wing 120 feet in length and 40 feet wide. Actually, it is designed as five buildings in one with each seventeen-man unit independent of the others. There is no basement, and heat will be supplied from gas burners on each floor of each unit.

To keep construction simplified as much as possible, concrete block is the principal material used. All walls, inside and out, are built of blocks. Even the foundations were laid with blocks to give the students training and experience where mistakes would not show. Also to simplify construction,

the ground floor is poured concrete; reinforced concrete beams are laid side by side atop the walls to make the second floor. To harmonize with the other campus buildings, however, a pitched roof will be used and a brick facing added to the outside walls.

College officials estimate that the volunteer labor will cut \$75,000 from the architect's original "guesstimate" of \$160,000. This leaves \$60,000 for materials and \$25,000 for skilled labor, such as plumbing and heating installation, and the salaries of supervisors. Actually, the considerable amount of material that generous manufacturers have contributed to help those who are helping themselves will cut the costs even more.

To guide the construction and direct the student workers, the college employed a project supervisor, a former schoolteacher with construction contracting experience who was inspired enough by the idea to give up his own small business to devote fourteen hours a day to the project. Certainly, such an undertaking demands all of the patience and understanding guidance of

a teacher, along with the experience and construction know-how of a builder.

Students are not asked to keep regular hours on the project; instead, it is a spare-time enterprise with no compulsion. There is no criticism of those who do not help. Yet 95 per cent of the students have participated.

When the volunteer has some time he can give to the building he signs in at the project and reports to the supervisor. He or she then is assigned to a student foreman in charge of a particular section or job for the day, afternoon or night. These student foremen are selected from those who have gained the most experience and skill in particular operations. A normal day will see from twenty-five to forty at work at nearly any hour. In completing his work for the day the student checks out at the headquarters tent. From this record, the total number of hours worked is tabulated, and the individual's own contribution is recorded.

Honorary clubs, the Fifty Club, the One Hundred Club, and the Two Hundred Club have been set up for those students who have contributed that many hours. Handsome printed membership cards are distributed as evidence of the achievement. Also, an 8 foot square replica bronze tablet was unveiled at the cornerstone ceremony, carrying the names of the students who had distinguished themselves. When the building is completed, a smaller bronze tablet with the names of prin-

cipal labor contributors will be mounted in the residence hall.

Just how well Dr. Marble's unique idea is succeeding is demonstrated by the fact that student morale has jumped at least 100 per cent since the project was begun. Dr. Marble hopes to prove, too, that this work-study combination will make education more intensive than straight liberal arts will and that the result will be better trained graduates.

"We will go just as far as we can before we ask for help," Dr. Marble counseled his students when the project was launched. But some of the people who heard the story did not think they need go far. By the end of the first week, several thousands of dollars' worth of material had been offered to help the students along with their building, and thousands more have been given since.

One company gave all of the cement needed for the entire building. An electrical contractor offered his services in directing the students doing the electrical installations, and another contractor offered to bring his men and put on the roof when the time comes. A Cincinnati manufacturer has donated roofing for the whole building and asphalt tile for all the floors. A glove manufacturer shipped the college 300

pairs of work gloves "to protect the tender hands of the workers."

Also, there have been hundreds of other examples of community help. All the members of the local Rotary Club, Lions Club, and Junior Chamber of Commerce have labored on the project. Nearly every day one can find some local businessman laying aside his white collar and tie to work alongside the students, and getting a terrific kick out of it. Even industrial groups are pitching in. Several crews from factories in the area come to work on the project at night and in other spare hours. All in all, the whole community is giving the students a firsthand example of the theory that others like to help those who help themselves.

Several prominent individuals have saluted Wilmington College students for their efforts. Herbert Hoover made a special private broadcast to the college and praised the institution for its reliance on self-help and the production of "uncommon" men and women. Senator John W. Bricker visited the campus, helped to lay some concrete blocks, and predicted later success in life for young people who were willing to invest themselves so generously in their college.

Last November a milestone was passed when the cornerstone on the "impossible" building was laid. Walls had risen to the level of the second floor in four of the five units, and even the most skeptical were ready to believe that the building, to house eighty-five men, would be completed.

Here students and faculty members are shown raising another wall on one unit of the five-unit building now under construction.



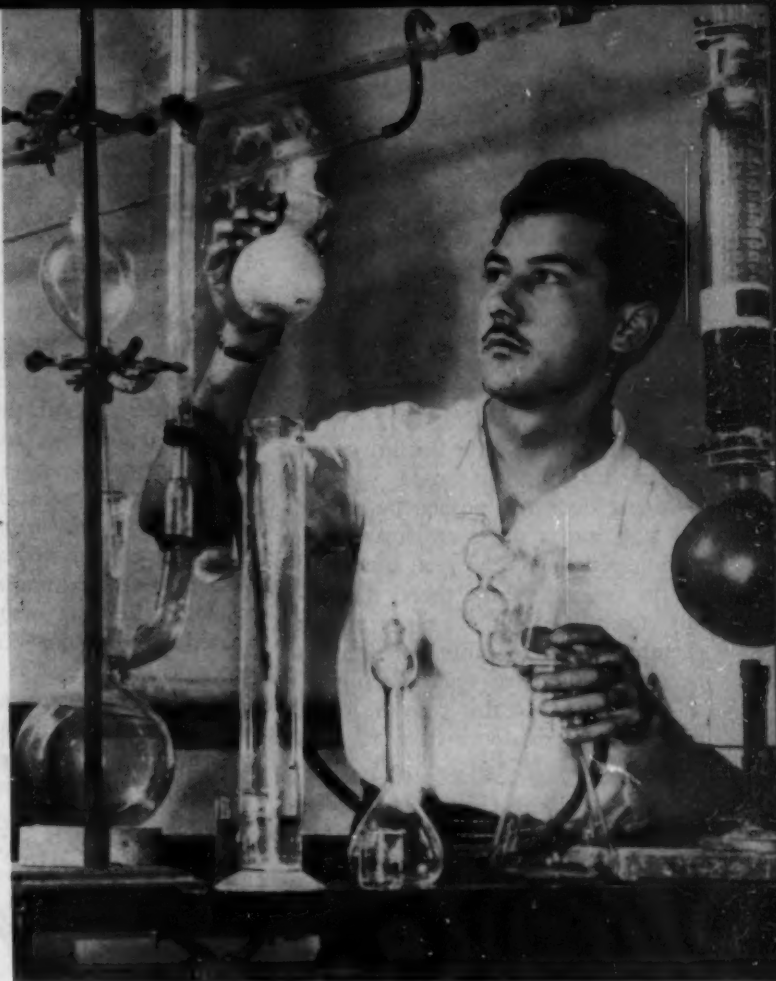
A student recently recovered damages resulting from an explosion in the chemistry laboratory on the grounds that the professor had been negligent in his supervision.

Higher Education can be

HAZARDOUS

H. P. STELLWAGEN

Executive Vice President
Indemnity Insurance Company of North America



MORE THAN TWO THOUSAND YEARS ago, Socrates was made to drink the hemlock for having corrupted the minds of the youth of his day. In succeeding centuries other educators and philosophers suffered persecution at the hands of rulers and mobs.

Things are different now. The modern college professor leads a less hazardous life; indeed, our institutions of higher learning now provide cloistered sanctuary for the doughty warriors of the battlefield and the hustings. In these enlightened days the hazards of higher education have moved from the political and the criminal into the civil field. Corporate liability has largely taken the place of individual responsibility, and capital punishment has given way to awards of damages.

This transition has not as yet become general or complete, but the situation demands the attention of those who are concerned with the financial affairs of colleges and universities. The legal liability to which a university may be subject is not always appreciated, but the damages flowing from that liability can be costly. The already

strained finances of the average college or university can ill afford depletion through the consequences of a serious damage suit. Furthermore, for reasons which I shall discuss later, it is likely that the liabilities that produce these damage suits may well be extended in the future.

So that you may know what I mean by the hazards of higher education, I refer you to the following court decisions:

Guilford v. Yale University (1942) 128 Conn. 449, 23 A2d 917. The plaintiff, who was a graduate of the defendant university and was a visitor there during the period of commencement and class reunions, fell to the bottom of a retaining wall near reunion headquarters on university premises. The court held that there was sufficient evidence upon which the jury could find that the plaintiff was free from contributory negligence and had not exceeded the limits of his invitation and that the university was guilty of negligence in failing to anticipate the danger from the particular use made of the premises by the plaintiff. The court stated that it did not subject the defendant to an undue burden to require that it exercise rea-

sonable care to see that not only the buildings assigned for headquarters but also the surrounding grounds were free from traps that were dangerous to life and limb.

Stockwell v. Leland Stanford Junior University (1944) 64 Cal. App.2d 197, 148 P2d 405. Here the court held that the trial court had improperly granted a nonsuit in the case of a student who had been struck in the eye by a bullet fired from a BB gun by an unknown boy on the university campus while the injured student was riding in an open truck that was leaving but was still on the university campus.

The court concluded that, under the circumstances attending the occurrence of injury, the question of whether the university exercised reasonable care to protect its students was a question of fact which the plaintiff was entitled to have submitted to and determined by a jury.

Daniels Adm'r v. Hoofnel, 155 S.W. 469 (Kentucky 1941). The court decided that a state college was responsible for the acts of its watchman in shooting and killing a visitor on college grounds who did not stop when called upon to do so.

From a paper presented at the meeting of the Eastern Association of College and University Business Officers, November 1948.

Leahy v. State, 46 N.Y.S. 310 (1944). A police officer who, at the request of Syracuse University (a state institution), was posting guards to prevent rowdiness at a football game on the following day was allowed to recover against the state when he fell over a chain stretched across a road near the stadium.

Hughes v. President and Directors of Georgetown University, 33 Federal Supplement 867 (D.C. 1940).

The court upheld the liability of the college for injuries caused when a swinging door was pushed by one of the staff into a nurse employed by a paying patient in a hospital conducted by the college, on the theory (generally accepted) that a charity is not exempted from liability for injuries negligently inflicted upon "strangers" to the charity. In this case the court mentions the existence of a \$25,000 liability policy.

Brigham Young University v. Lillywhite, 118 Fed. (2d) 836 (C.C.A. 10, Utah 1941). A student recovered for injuries resulting from an explosion in the chemistry laboratory on the grounds that the professor in charge had been negligent in his supervision, and that there is in Utah no exemption of colleges from tort liability.

Weltman v. N.Y.U., 35 N.Y.S. 892 (1942). The court upheld, against a claim of charitable exemption, the liability of the university for injuries caused by defective equipment and failure to provide safeguards.

Rhodes v. Millsaps College, 176 So. 253 (Mississippi 1937). The college was held liable when a small boy was decapitated while looking into an elevator shaft in a building of the college rented out for commercial office use and alleged not to be properly supervised. This was on the theory that the college had engaged in noncharitable activities.

These several cases serve to point out some developments in legal philosophy which I feel should be particularly significant for those in charge of the finances of educational institutions.

During much of our earlier history it was a general rule of what lawyers call horn-book law that schools, colleges and the like were exempt from the consequences of their negligently wrongful acts. Public educational institutions were generally considered to share the immunity of the sovereign state, and private institutions were

given a similar immunity as a means of promoting charitable, *i.e.* educational, activities.

I do not mean to say that this rule has now been wholly abrogated. It would be misleading to deny that it still has considerable strength and that you can still look to it as a source of appreciable comfort.

However, there are certain marked tendencies toward increasing the responsibilities of both public and private schools, colleges and universities for the wrongful acts of their staffs and employees. One such tendency is found in the increasing willingness of governmental authority to waive the rule of sovereign immunity that has its origin in the personal privilege asserted by individual kings and emperors.

The federal government has recently placed itself on nearly the same plane as a private individual, insofar as torts



committed by federal officers, agents and employees are concerned. New York and California have taken similar steps with regard to their state-run educational institutions. It is more than likely that other states will follow this lead.

Another tendency in the same direction is found in the realities of modern educational activities rather than in any change of legal rules. The doctrine of "sovereign immunity" to which I have referred has always been subject to the limiting rule that the sovereign loses this immunity when he (or it) abandons the governmental rôle and engages in the usual commercial ventures of the subject. To the extent, therefore, that a school, college or university departs from education *per se* and begins to offer entertainment in its theaters or stadiums or to practice trades or professions in its shops and clinics it runs the risk of being subjected to the tort liabilities

of the average citizen similarly engaged.

A factor that may accelerate these tendencies is the increasing awareness, on the part of our courts and legislatures, of the possibility of obtaining insurance against risks to which they might otherwise hesitate to expose educational institutions. For an interesting judicial opinion in this field, I refer to the case of *Taylor v. Knox County Board of Education*, decided by the Kentucky Court of Appeals in 1942, in which the judge remarks:

"The legislature may make school boards liable for their torts or the torts of their agents and employees, and we know of no reason why it may not take a middle course and empower them to protect by liability insurance persons injured by the negligence of their bus drivers and to provide that the liability of the insurer shall be determined by the final judgment obtained by the injured person."

INSURANCE PROTECTION

Having reviewed the applicable law and noted some cases of liability imposed upon educational institutions, we now pass to a consideration of insurance protection against losses arising from that liability. In certain jurisdictions and under certain circumstances, universities and colleges are immune from liability and are not to that extent under pressing necessity to purchase insurance protection. However, many such institutions have elected to ignore the immunities which the law gives them and to accept voluntarily through the purchase of insurance the same obligations for tort actions that rest on ordinary business or commercial enterprises. In other words, many universities purchase insurance under an agreement with the insurance carrier that it will respond to claims for bodily injury, death and property damage in the same fashion as it would respond under policies issued to cover the liability of non-charitable persons, firms and corporations.

The insurance available for protection against claims and suits for bodily injury, death and property damage suffered by the public is called public liability insurance. It is, obviously, important that the provision of the policy be broad enough to include all situations and activities involved in maintaining and operating a college or university. It should cover operations performed by the university's em-

ployes or by others, both on the university's premises and away from such premises.

Underwriters differ in the manner of covering the hazards arising from the maintenance, operation and use of automobiles. Some recommend the inclusion of this hazard in the blanket or comprehensive policy; others recommend that the hazard be covered under a separate comprehensive automobile policy. The important consideration is that, however handled, the automobile coverage be complete.

Colleges and universities may own their own trucks, passenger cars, or buses. They may hire vehicles or make arrangements with independent contractors for the transportation of members of athletic teams or glee clubs and for the hauling of equipment. Again, individual faculty members or others may use their own automobiles, usually of the private passenger type, in the business of the university. Under these and other situations, liability for the operation of automobiles may attach to the university; it is, therefore, of the first importance that the automobile coverage be broad enough to cover all phases of automobile operation in the business of the university.

Generally speaking, liability policies are written in the name of the university, with the interest of trustees or members of boards of governors included without additional premium charge. Because of peculiar statutes in Connecticut, New Jersey, and New York, policies issued to educational institutions in those states are written to cover without additional premium charge the interest of individual members of the faculty, the basic rates reflecting this additional exposure. In other states, where the rates are not so predicated, the interest of individual faculty members may be covered under individual policies at a specific premium, or the interest of all may be included in the general policy issued to the university for an aggregation of the individual faculty premiums.

WORKMEN'S COMPENSATION

Thus far we have spoken of insurance protection against loss arising from claims and suits brought against universities by members of the general public. It should be kept in mind that policies of public liability insurance do not cover injury or death suffered by employes of the university. What is needed for this purpose is a policy of workmen's compensation in-



urance. The obligation upon colleges and universities to carry workmen's compensation insurance will be found in the workmen's compensation acts of the respective states.

Workmen's compensation insurance for educational institutions is provided under standard policy forms and is written at a rate for each \$100 of pay roll applicable to teaching employes and separately to all other employes. It is desirable that a so-called extension endorsement be attached to the compensation policy so as to cover the university's liability under the compensation acts of other states.

With this arrangement there should be no question of coverage in respect to members of the faculty traveling over state lines with choral or dramatic groups, or engaging in research projects in other states. As regards members of the faculty engaged in research work in other countries, it is possible to provide voluntary compensation insurance on the basis of the benefits available in the university's home state.

THEFT INSURANCE

There is another and quite different area in which a college or university is susceptible to serious financial loss. I refer to loss by theft, using that term in its broadest sense.

A New England college recently suffered severely from a robbery in the student commons. Another college lost \$21,000 through the burglary of a bookstore safe. If you were to make a survey of your premises and operations, you would undoubtedly find that you were exposed at many points to loss by burglary, robbery, hold-up, larceny, theft, forgery and the dishonesty of employes.

The bursar's office will probably contain money at all times and particularly large amounts of money during periods of registration. The athletic association and its subsidiary ticket offices

will have heavy receipts particularly in the football season. There may be large exposures of cash at restaurants, bookstores, students' commons, libraries and clinics. Dental schools may have large exposures of gold and platinum.

Universities, like any business institution, are exposed to the hazard of destruction of valuable papers. Such papers might be records that could be restored or replaced but only at large cost, or they might be collections of documents in libraries that are irreplaceable but possess a high intrinsic value.

For protection against loss in this wide area of theft and destruction, the most comprehensive and generally the most satisfactory form for covering money and securities is the comprehensive dishonesty, disappearance and destruction policy.

OTHER INSURABLE HAZARDS

There are still other hazards involved in the business of higher education and other forms of insurance designed to safeguard colleges and universities against them. Some colleges maintain airfields and flying schools, and for them aviation bodily injury and property damage liability insurance will be of interest. Some institutions maintain their own power plants and may have costly mechanical and electrical equipment in their laboratories; for them boiler and machinery insurance will be of interest.

Finally, there is the whole field of personal accident and health insurance with which both faculty members and students may be concerned. College students may be insured on an individual or on a blanket basis. Generally speaking, weekly indemnity insurance will be inapplicable to students because of the lack of earned income, but policies may be purchased involving indemnity for death or dismemberment and reimbursement for medical expense because of injury. Members of the faculty may likewise be insured on an individual or a group basis and, obviously, they will be interested in weekly indemnity coverage in addition to the other benefits available.

Some colleges make available to their students blanket medical expense reimbursement for accidental injury sustained during either the school term or the complete calendar year, the cost thereof being met by the individual students interested in the coverage.



Left: The stage is set for the ceremony itself. Right: The final social event was the garden party at Allerton Park, where guests are shown touring the grounds.

It takes a heap of planning before **A PRESIDENT**

A NEW BOOK, *FERMENT IN EDUCATION*, has been announced recently by the University of Illinois Press. It is a handsome volume, well illustrated, containing the addresses of the many prominent persons from academic, medical, military, business and professional circles who spoke during the ceremonies attendant upon the installation of Dr. George Dinsmore Stoddard as tenth president of the University of Illinois.

The installation ceremonies held May 15 and 16, 1947, were of sufficient significance that they were widely reported in the metropolitan press and the weekly news magazines; a considerable part of the program was carried on major radio networks. The two-day event, however, was accepted at the time without much thought of the nearly two years of work that went into the planning, the actual ceremonies, and the final publication of the proceedings.

There are two possible methods of directing such a ceremony: hire a professional director, place him in charge, and give him a budget and authority to plan and operate the program; or utilize the institution's own staff and

FRED H. TURNER

Dean of Students
University of Illinois

expect cooperation and willingness to work to accomplish an equally successful event. The University of Illinois chose the latter procedure.

President Stoddard set a simple specification for the event when he stated that, if there was to be a formal installation ceremony, it should be in the highest tradition of excellence and academic good taste. This was the guiding policy for all committees and committee chairmen.

The University of Illinois has its main campus at Urbana, its professional colleges in Chicago, 125 miles away, and undergraduate divisions established since the war at Navy Pier in Chicago and in the Mayo General Hospital buildings at Galesburg. Its greatest concentration of alumni is in the Chicago area.

After the appointment of the general chairman, a tentative program was set up, proposing that the ceremonies should cover a two-day period, with the first day in Chicago and the second

day, and the main events of the installation, at the Urbana campus.

Proposed items in the program for Chicago began with professional conferences at the medical, dental and pharmacy colleges, and the school of nursing, with a simultaneous open house at Navy Pier, followed by a luncheon for the professional guests. The afternoon events included an educational conference at Navy Pier, followed by a reception, and at the conclusion of the day, a formal banquet in a Chicago hotel. The second day at Urbana would be the real event, the installation, a luncheon, an educational symposium, and a reception or social event to conclude the day.

The president, the provost, the general chairman, and representatives of the board of trustees, the faculty, the alumni, the citizens committee, and the student body joined in the consideration of the tentative program, approved it, and decided that the final social event should be a garden party at Allerton Park, to serve as the initial opening of this magnificent gift to the university. With approval of the program, actual work of planning the



IS INSTALLED *but the University of Illinois proved that* *good taste in arrangements comes only from attention to minute details*

ceremonies began. It was apparent that many interests would have to be served and that many members of the faculty and staff would have to give freely of their time and energy in planning and executing the events. In all, twenty-seven committees were appointed from faculty, staff, board of trustees, alumni, students and citizens, and nearly 300 persons from these groups served on committees and subcommittees. The final result was a program that moved so smoothly that not a major hitch developed, and the chairmen of all major committees and most of their members were able to participate in and thoroughly enjoy the various events.

The selection of committee chairmen and committee members was done with the following points in mind: persons who were in authority and should have a voice in the planning; those who could call upon assistants without difficulty and whose word would carry weight; representation from all groups that should have a voice in certain events and parts of the program; persons with know-how for special jobs for special events, and

finally persons who through previous experience and demonstrated ability would work conscientiously. Included were university personnel, undergraduate students, alumni and friends.

The twenty-seven committees classified logically into three groups: (1) six general committees; (2) eight committees for special events; (3) thirteen committees for specific elements in the program. Several of these major committees appointed subcommittees to facilitate their duties.

The six general committees were primarily policy making or reference units and with the exception of the "general committee on the installation," made up of the chairmen of the other general committees, were set up to give all interested groups a voice.

Above, right: Main registration desk where delegates received a packet of tickets, maps and instructions. Duplicate registration and information offices were an aid to late arrivals. Right: Several committees coordinated in planning for the processional; 600 marched.



These committees included the board of trustees, the university senate (faculty), the student senate (the student body), the alumni, and the citizens committee (an advisory group of some 300 business and professional friends of the university). It seemed highly important that these groups have an opportunity to voice their opinions and wishes.

Of the foregoing committees, the committee of the university senate had perhaps the most important assignment, namely, "to consider, criticize and determine policies to be carried out in regard to the entire program of the installation, especially in regard to the formal, academic and processional phases." The chairman was especially careful in observing the niceties of formal procedure in such matters, since the basic objective of the entire ceremony was academic in character.

The eight committees for special events not only made their own plans in cooperation with the general committee but were assured the cooperation of the thirteen committees on special elements in the program, there being a large amount of interplay and even interlocking of memberships.

THREE MAJOR PROBLEMS

Three immediate and major problems at the special events were the questions of presiding officers and speakers, also the selection of members of the clergy for spiritual aspects of the events. The president of the board of trustees made the assignments of board members to preside at the events; the speakers were selected by the president of the board, the president, the provost and the vice president. The clergymen were suggested by the president himself.

Six of the eight committees on special events had the usual problems of educational meetings, conferences, luncheons, banquets, receptions and all of the details that accompany such events. The other two, for the processional and installation and for the garden party, had unusual and less familiar problems. The key to success in such events lies in the simple expedient of using and accepting the assistance of persons familiar with such events.

The thirteen committees for various elements on the program were the real working committees. There was much interplay among these committees. The committee on honorary degrees, once the fact was established that cer-

tain honorary degrees were to be conferred, was made up of high ranking faculty members who wrote the citations for the persons receiving degrees and individually served as special host for a degree recipient throughout the ceremonies, was his marching partner in the processional, and attended him at all times.

The success of such an event has a mutual aspect. To be successful, the program must be a good program; if, however, the delegates who are the guests of the institution are not made to feel that everything possible has been done for their comfort, convenience and general satisfaction, the success may be doubtful, regardless of the excellence of the program. Therefore, all committees worked with the thought of extending every courtesy and hospitality possible to the distinguished representatives who attended.

The committees on invitations and on printing and engraving dealt with delegates in a working relationship of who was coming and with the university. The committees on registration and information, reception and hospitality, housing, transportation and traffic, and academic costumes were all working for the comfort and convenience of guests. Special committees on decorations, music, ushering and publicity were less concerned with individual delegates than with aspects of special events.

In planning such an event, an immediate question is: Who shall be invited? Our policy committee agreed upon the following classes of institutions and individuals to be included: foreign colleges and universities with which the University of Illinois has had special relationships; all institutions belonging to the same associations and organizations to which this institution belongs; all colleges and universities in the state; national associations and societies in which we hold memberships; state organizations; state officials; the state legislature; United States senators and congressmen from Illinois; Illinois supreme and appellate court justices; United States cabinet members and other federal officers; Illinois newspaper editors; national education journal editors; Illinois school superintendents and principals; teachers college representatives; representatives of organizations related to education; former presidents and their families; the citizens committee, and the president's personal list of guests.

With part of the program in Chi-

cago and part in Urbana, there were certain guests who attended events in one place or the other and many attended in both. This was worked out by the invitations committee and the chairmen for special events.

Practical aspects of operation for the committee on invitations were: the making of the lists for invitations, preparing the copy for invitations and the type of reply sought from persons accepting, receiving the replies, and, as soon as delegates were named by units invited, supplying information concerning delegates to the printing committee for the official program of delegates, and to the housing committee if housing was needed.

INVITATIONS AND TICKETS

The mailing room of the university library proved to be an entirely satisfactory headquarters for the invitations committee, and the person in charge with her tremendous knowledge of institutions and persons was invaluable in this work.

The committee on printing and engraving handled the preparation of all invitations, tickets, instructions and preparation of the official program. Two items need special mention: get all copy for printing and engraving in as early as possible, and allow a time factor; hold the copy for the official program to the absolute last minute before going to press as changes and additions will be made right up to time for the program. The official program must be accurate, for it is the true record of the event for most people.

As soon as a delegate was named by an institution he was assigned housing if desired, and he was instructed as to his procedure upon arriving on the campus. Delegates were asked to register upon arrival, and the committee on registration and information handled this detail. Two headquarters with duplicate facilities were established at opposite ends of the campus.

When a delegate arrived at the registration desk, he registered and, if he had been named in advance, found waiting for him, at either office, a packet of instructions with maps, tickets for events and meals, everything that he needed in the way of directions for his complete participation in the program and events. If he had not been named in advance, a packet was prepared for him at once.

The value of the duplicate registration and information offices was well

proved, for early arrivals used the central office in the union building, while late arrivals found the office in the library, within a stone's throw of the start of the processional, the means of being on time.

The committee on reception and hospitality maintained a delegation at the registration desk at all times. The chairman was prepared in advance to watch for certain guests for whom sponsors had been assigned. We attempted to see to it that every guest had a sponsor, and we think that most of the 600 special guests were thus treated, some by previous and many by last-minute arrangement.

HOUSING PROBLEM SOLVED

Since the University of Illinois is not in a metropolitan area, housing facilities were a serious problem. As soon as the dates for the installation were set, the chairman of the housing committee reserved all available hotel rooms in the community and in the surrounding territory, also a large number of rooms in private homes. Whenever delegates were named in advance, as the majority were, housing was assigned in advance, and the delegate was notified and given his reservation. The housing desk in the information center had plenty of last-minute work, however, but all guests were accommodated.

Coordination between housing and transportation was an interesting factor, for the special train that brought many delegates from Chicago to Champaign was simply placed on a siding, and the solid train of drawing rooms and bedrooms provided the equivalent of hotel rooms for a sizable number of guests.

The committee on transportation and traffic divided its work into six sections: air, bus, automobile, railroad, traffic control, and general traffic items. From the faculty and staff were recruited sufficient private automobiles and drivers to have cars available at all points at all times, with stand-by bus service in the event the cars were all filled. These faculty cars were equipped with identifying windshield stickers. Shuttle bus service was established in both Chicago and Urbana.

Two special problems of transportation had to be met. First was the night movement of those who attended the banquet in Chicago to Urbana in order to attend the installation the next morning. Second was the movement of about 2000 persons to the Allerton

estate for the garden party, following the symposium on higher education, a round trip of about 60 miles.

The Illinois Central Railroad solved the first problem by providing what proved to be one of the most glamorous events of the ceremonies, a special train made up entirely of bedroom and drawing room units, plus two office cars and two diners. Most of the guests went from the banquet to the station in Chicago in their formal clothes, went to bed, and were in Champaign the next morning.

The trip to Allerton was made mostly in private cars but with bus service as needed. Cars, waiting after the symposium, moved in convoys with state policemen leading to the Allerton estate near Monticello, Ill.

The aim of providing transportation for each delegate guest as needed was well exemplified by the fact that a federal official who participated in the afternoon symposium was flown to Bloomington, Ind., in time for a speech in the evening, and the president of a great eastern university was driven to Milwaukee after the ceremonies in time to make a meeting scheduled there, even though he did have to eat his luncheon on the way, a picnic lunch which was ready for him when he left.

The committee on academic costumes provided a service that proved popular with delegates. In the original invitation, the offer was made to provide the academic costume here if specifications were provided by the delegates, and many delegates sent in the request for such service. The committee established an office in the university library near the start of the processional. Delegates called at this office, checked their hats and coats in a room provided there, obtained the proper costume which was ready and properly labeled for them, and returned the costume after the ceremony.

The committee on decorations provided the special decorations; the committee on music looked after the band music for the processional and during the installation services and provided the chamber music group for the garden party. The committee on ushering provided the ushers for all events. In most cases, representative students served in this capacity, both at the installation ceremonies and at the educational conferences.

The committee on publicity, headed by the university's director of public relations, took charge of all news re-

leases, special invitations to representatives of publications, news associations, journals, radio stations, and newsmen, provided pictures and mat services, provided an "installation kit" for every reporter present, reserved special seats, reserved special parking spaces, and did everything possible for the convenience of members of the press.

This committee utilized university and professional services in the taking of motion pictures of all main events, including interior pictures, and after all the formal events were over assembled a motion picture reel of the installation, which has been very useful in alumni club work. Adequate lighting for interior pictures in color, without seriously increasing the temperature of the room, was a great problem, as well as the location of the cameras, and this committee worked out such problems.

DETAILS OF PROCESSIONAL

In planning the processional, all confusion was eliminated by careful coordination and planning by several committees. Since there were some 600 persons in the processional, each delegate received with his packet of instructions a number card, a map of the forming place for the procession with his place marked. A number was chalked on the walk, corresponding with his card, giving him his exact position, and an adequate number of signs on poster boards was established to enable each delegate to get to his place quickly.

With the great demand for admission to all events, tickets in different colors were a great aid for the ushers and persons checking admissions. Tickets of one color admitted the bearer to a special reserved section for friends and relatives of those participating in the ceremony, another color admitted to a special reserved section on the main floor, and still another admitted the bearer as long as seats were available. Loud-speaker equipment should be set up outside all major events, however, to take care of the overflow which cannot be accommodated.

It should be apparent that the planning and operation of a large installation ceremony is one of many details and much planning. It is impossible to mention all of the minute details that must be handled. It is the attention to these minute details that gives the whole an atmosphere of good taste and achieves the excellence which the president specified at the outset.

SHALL COLLEGES OPERATE BUSINESSES?



M. M. CHAMBERS
American Council on Education

WHEN A UNIVERSITY ACQUIRES AND directly operates a manufacturing plant or other commercial enterprise solely for the purpose of making profits to be applied to its nonprofit educational purposes, the income thereby gained, if any, is not taxable under the federal income tax act because *no portion of it accrues to the private gain of any individual or corporation.* In a time of price inflation and low interest rates, such income may accrue at a higher rate than can be obtained from any other form of investment. But this type of investment may be especially vulnerable to reduction of income and depreciation of principal in time of depression. It should therefore be undertaken with caution and sparingly, if at all.

NO TAX CHANGE NEEDED

To be sure, when a tax exempt college purchases a business, part of the income tax formerly paid by the preceding owner is lost to the government; but if a nonprofit educational institution gains financially from the transaction, then the government's loss of a relatively small amount of tax money becomes actually a simple and direct way of granting a modicum of federal aid to higher education—a practice as old as the government, and highly respected.

The argument that the tax exemption gives an unfair advantage in competition with private business will scarcely hold water, because in practice college owned businesses do not attempt to undercut and destroy their competitors at the expense of their own profits. They cannot afford to in-

dulge in the risks of destructive competition.

There is no valid reason for making the federal income tax applicable to nonprofit educational corporations or any of their activities, so long as the proceeds of all transactions are dedicated to nonprofit educational purposes.

The main functions of a university consist of instruction, research and extension service, but the institution's business cannot be confined by any means to these in any narrow sense. It is a long-accepted principle that *a tax exempt educational institution may properly operate any enterprise which is essentially accessory to its educational function or which is necessary to make the institution a healthful, convenient, safe and well ordered dwelling place.*

Dormitories and apartment houses for students and faculty, family dwellings for the president and professors, dining halls and student union buildings containing a great variety of community facilities for which reasonable fees are charged generally come under this principle. It follows that according to the best legal reasoning *the properties, incomes and transactions of these enterprises are properly exempt from taxation.*

Courts will not hear the complaint of a local restaurateur that a college operated refectory is ruining his business. Proprietors of rooming houses cannot complain that a university residence hall will deprive them of their accustomed way of making a living. These people have no legal recourse even if the institution makes exclusive use of its own housing and dining fa-

cilities compulsory for students. Barbers, pool room operators and soft drink vendors cannot invoke the aid of the courts to prevent the student union building from housing a barber shop or billiard room. Local booksellers cannot get the long arm of the law to strike down a university bookstore.

Agricultural colleges maintain farms stocked with valuable flocks and herds and carry on production in field crops, horticulture and dairying as essential means of instruction. Liberal arts colleges often operate farms to supply the college dining halls and sometimes also to afford the student some firsthand knowledge of the characteristics of rural life and work. Some institutions have long operated small industries, primarily as service adjuncts to the college and often to afford employment for students who need to work. In all these instances some surplus products are commonly sold to the general public, and some services are frequently sold to the local noncollege community near the campus.

The sound principle is that such enterprises operated by a tax exempt educational institution *are properly exempt from taxation as long as they are maintained primarily for the industrial education of students or to afford needy students a means of livelihood or as necessary sanitary adjuncts,* and the incidental sale of surplus goods or services does not make them taxable.

STATES DIVIDED

When a privately controlled nonprofit college or university holds property, either real or personal, solely and exclusively for the sake of producing money income for the educational purposes of the institution, the forty-eight states are divided on the question of whether such property is taxable, with about half of them taxing it unless it is protected by an irrevocable provision of an early charter of the institution. The income of such property, however, to be applied to nonprofit educational purposes, *is not taxed under the federal income tax statutes, because it accrues to a tax exempt institution for a tax exempt purpose.* That principle is sound.

In these times when endowment income is greatly reduced and when student load is tremendously increased, no thought of cutting down the application of that principle should be entertained. It would be wiser to consider ways and means of protecting and extending its application.

COLLEGES AND UNIVERSITIES are realizing more today than ever the value of the snack bar, coffee shop, or whatever you choose to call the center of campus life where students and faculty members can gather for a snack or a chat. The snack bar should be recognized as an important factor in developing and maintaining student morale.

Between classes, during the afternoon or evening, a cup of coffee, a sandwich, a dish of ice cream or a soda around a table with a fellow student or a professor provides an opportunity for discussing intellectual and personal problems in a friendly and informal atmosphere.

Careful consideration must be given to the location of a snack bar if it is fully to serve its purpose. If possible, it should be located centrally in relation to student activity on the campus. Easy access to students and faculty means greater volume of business, which is essential if operating results are to prove satisfactory. A snack bar should and can be operated without cost to a college or university under proper direction. First floor locations are preferable, although many colleges have found that, because of space restrictions, basement or other than first floor areas must be used.

A snack bar should be decorated tastefully and should have sturdy and attractive furniture, with counter and table tops of composition material. The counter should be of sufficient size to handle a maximum crowd with a minimum of delay. Twenty-four or 30 inch tables with four seats to the table allow ample room for service and make it possible to rearrange seating easily.

The proper choice of colors for walls, floor, furniture and counters can aid materially in making the snack bar a place where students like to meet. The more popular the spot, the more business will result, and successful operations depend largely on volume.

Another important matter requiring careful consideration is that of the hours during which service is available. There can be no hard and fast rule as to the opening and closing time; experience must be the determining factor.

When the snack bar at Middlebury College was first put into operation, it

was open daily from 8 a.m. to 11 p.m. Subsequent experience has shown that at times it may be wise to close on Saturday and Sunday afternoons and to vary closing and opening hours because of various college and student functions. A careful check on volume should indicate the hours it should be open for business.

Additional consideration should be given to the selection of employees. A number of colleges refuse to make use of student help because of its apparent lack of responsibility and the difficulty of maintaining a proper and effective staff. In our opinion, the ideal setup is to use full-time nonstudent help. On the other hand, opportunities for student employment are greatly limited in Middlebury, and use has been made of students as part-time help in supplementing a nucleus of two full-time men.

When the snack bar first opened, employees were allowed unlimited amounts of food. However, with twenty to thirty students working a day, some for one hour or less, experience showed that the profits quickly were being eaten up behind the counter instead of going into the cash register. Now, only those employees working during meal hours are allowed to eat snack bar food. This combination of restricting the use of food and the use of responsible full-time personnel to direct the part-time help has resulted in a most gratifying improvement in our operating results. In fact, since this policy, although somewhat harsh, was instituted, the over-all picture at the end of the month resulted in a saving of 50 cents per student employee per day. On the basis of present operations, a labor cost not in excess of 20

per cent of gross seems to provide proper and sufficient help.

The snack bar is under the general supervision of the director of food service, with a direct supervisor.

Considerable thought has been given to the policy of serving meals along with light lunches. Since ample facilities are available in both town and college for those who wish to get regular meals, the snack bar has restricted its service to light lunches and soda fountain service. This action appears to be justified owing to the light demand for regular meals, the high cost of equipment necessary for complete food service, and the additional space that would be required.

In operating a snack bar, close attention must be paid to costs and operating results. Proper charges for heat, light and power should be included in operations, and consideration must be given to a proper rental charge. Even though these items are not put through the books as direct charges, they should be considered in establishing prices. Depreciation of equipment should by no means be overlooked; thus rates of at least 10 per cent should be allowed for furniture and equipment.

Prices should be scaled so that a reasonable surplus remains after provision for all charges. At Middlebury College any such surplus remaining is set aside to help maintain and operate the student union building in which the snack bar is located. This procedure means that all surplus accruing through student business actually is used for the students' own benefit.

One item that should not be overlooked is coffee. Many snack bars have established a price of 5 cents per cup, and when the snack bar at Middlebury

Some tips on operating a SNACK BAR

IRWIN K. FRENCH

Business Manager
Middlebury College

was first opened it was sold for that price. Coffee is one of the most popular items, and after seeing the snack bar crowded all day long and ending up without sufficient income to meet all charges, the following analysis was made of the cost of this one item:

Including all charges, coffee, cream, sugar, breakage, replacement of equipment, depreciation and labor, a cup of coffee was costing 7.2 cents per cup as against a 5 cent selling price. After the price was increased to 10 cents per cup, operations showed a more satisfactory picture, and surprising as it may seem, no criticism was raised.

Based on a volume of \$35,000 during the last ten months, food costs averaged 55 per cent of sales with labor

costs 20 per cent. This leaves a substantial amount to cover other previously mentioned operating expenses, as well as laundry, cleaning supplies, repairs and maintenance, and administrative overhead.

During the first year's operations, a net income of approximately 6 per cent was realized after all charges. With changes made in operating procedures, based on experience of the first year's operations, it is expected that the percentage of net return will amount to nearer 10 per cent, which we feel would be satisfactory and within reason.

Of considerable interest to snack bar operators is the question of cash control. In large installations, there prob-

ably is justification for a full-time cashier. However, in small operations, such as ours, we have found that a cashier cannot be justified and that each clerk should handle his own cash. Of course, under this arrangement, shortages will occur that cannot be traced, and it well may be that some free food is passed over the counter. On the other hand, such losses would in no way justify the expense of a cashier who would have nothing to do with service.

To those colleges without a snack bar, we urge their consideration of this addition to their campus facilities. Under proper management and supervision, it can add much to college life and help to maintain a high standard in student morale and relationships.

Our experience with coin operated LAUNDRY MACHINES

T. DAWSON BLAMIRE

Superintendent of Buildings and Grounds
Radcliffe College

BECAUSE OF AN INSISTENT DEMAND from the student body living in the residence halls, Radcliffe College installed a coin operated washing machine, owned and operated by an outside company. The contract with this company was of the usual type whereby the institution received 10 per cent of the proceeds with each wash costing 10 cents.

My own belief at that time was one of doubt that the 10 per cent would cover the cost of operating the machine, but since then the costs of water and electricity have been figured. Exclusive of electrical charges for our own equipment, pole rental, demand charge, and the fuel clause adjustment charges, the approximate cost was \$0.007 per wash. If all the charges were included, the 10 per cent on a 10 cent wash would not pay for the total operating expense. Considering this, it seemed desirable for the college to purchase its own washing machine to be operated solely for the use of its students.

I wanted to supply a much needed service to the students and, at the same time, one that might be more than self-supporting. It was hoped that the revenue from our own machine might eventually take care of all the costs, including such things as the amortization of the original investment, repairs and maintenance, and that a surplus might remain that could be used for

some college purpose for which funds otherwise might not be provided.

Accordingly, a nationally advertised machine was purchased and set up in a residence hall laundry room. The next step was to locate a coin operated meter that would serve the unit and not conflict with the type installed on the outside company owned washing machine. This was bought from a concern in Connecticut and was designed to operate for thirty-five minutes at 10 cents a wash. This coin meter does not connect with the timing device of the machine in any way but controls the time that the electrical energy is supplied to the machine. It is placed in the electrical line ahead of the machine, and the connection from this unit is made permanent with flexible metallic tubing so that no temporary extension can be made to by-pass the coin meter.

The policy of outside companies seems to be to try to discourage individual institutions from operating their own units. These companies maintain that under their operating policy, with their trained mechanics and inventory of parts, they can handle repair and servicing of the machine better and faster and, consequently, no complaints revert to the institution.

Our experience seems to show that the rented machine is idle by reason

of breakdown about as often as our own, and we receive just as many complaints with respect to the rented machine as we do concerning our own.

The experience with our own washer has been very satisfactory. There has been the usual amount of difficulties that inevitably accompany automatic equipment operated by students. One must assume that with no supervision you can expect difficulties to occur when students attempt to obtain free washings, in one way or another, and overload the machines with clothes and washing powders. We find that our machine is utilized from 6:30 a.m. until almost midnight.

It is possible for institutions to operate their own machines satisfactorily at low operating costs if they employ either an electrician capable of locating any trouble that may arise throughout the motor, timer and electrical relay controls or a good mechanic with the ability to perform this work. Another method is to call for service from the manufacturer.

We are planning to purchase another washing machine of a different manufacture and install it in the same residence hall. Students may then operate either and evaluate the merits of each unit. At the completion of this installation we expect to eliminate the washer not belonging to the college, thus keeping all revenue for such student needs as may seem desirable.

Looking Forward

Priced Out of the Market?

COLLEGE ADMINISTRATORS WOULD BE WELL ADVISED to study carefully their charges to students for residence hall and food service facilities during the coming year.

Business, generally, is moving into a "buyer's market" and it would be wise for administrators in higher education circles not to overplay their hands in setting board and room charges. The student is a buyer—and he may refuse to buy. As it is, he is now paying about 50 per cent more for board and room than he did in 1940.

Recognizing that labor, construction and food costs have been the factors that prompted the increase in charges to students, it might make good sense to study those factors again. Is it necessary to provide maid service in residence halls? Students at Barnard College recently voted to do their own work in keeping their rooms clean as an alternative to an increase in room rates with maid service provided. Have we gone too fancy in room furnishings and facilities? Costs can be cut by reducing frills and luxurious accessories. Residence halls don't need to rival country clubs in equipment and décor in order to be acceptable. Food service costs appear to be declining, but better budgeting and control in general would have prevented food service departments from becoming the great loss they have been in many colleges.

There is such a thing as "pricing yourself out of the market"—a fact overlooked by many institutions if their fees serve as any indication. In naval parlance, it's time for a "taut ship." The time is past, in fact never should have been permitted, when careless administration and attendant high costs could be passed on to the consumer—your students.

What Is Academic Freedom?

THERE'S MUCH LOOSE TALK IN COLLEGIATE CIRCLES regarding academic freedom, by both those critical of it and those who would have it serve as a shield for any sort of behavior. Liberty and freedom should not be confused with license, any more than lust should masquerade as love. Academic freedom must presume objectivity and responsible performance, not irresponsibility and bias.

The recent dismissal of three professors from the faculty of the University of Washington and the placing of three others on probation have stirred nationwide interest again in the subject of academic freedom. The professors have been charged with being Communists and, by such affiliation, placing themselves in the position of support-

ing party dogma, one tenet of which is the overthrow of the government in power.

For an issue of such emotional potential, the investigation was conducted with unusual deliberation and proper dignity. A committee of the state legislature conducted its hearings with a fairness that was a sharp contrast to the Thomas Committee activities in our nation's capital. Following its report a faculty committee studied the case for seven weeks. The committee reported to President Raymond B. Allen, who in turn recommended expulsion action for certain professors and probation for others. The board of regents followed President Allen's recommendations. Certainly there appears to be little evidence of a hysterical "witch hunt."

Dr. Allen made a pertinent observation on the case that merits thoughtful analysis. "Academic freedom consists of something more than merely an absence of restraints placed upon the teacher by the institution that employs him. It demands as well an absence of restraints placed upon him by his political affiliations, by dogmas that may stand in the way of free search for truth, or by rigid adherence to a party line that sacrifices dignity, honor and integrity to accomplishment of political ends."

Stand on Your Own Feet

IT SEEMS TO BE THE CURRENT FASHION TO GRAB THE overnight sleeper or plane for Washington. Could it be that our problems in higher education can be solved if we buttonhole the right Congressman? It must be, judging by the increasing frequency with which educators head for Capitol Hill.

After all, from whom does "the federal government" derive its overflowing treasury? Certainly not from within itself. It has funds to distribute only to the extent that the cities, states and people in the hinterland provide them. How, then, can communities and states complain that they cannot finance higher education adequately within their borders, when it is those same local governmental units that constitute the sources of revenue for the federal government?

This may be considered to be simplifying economics to an extent that permits an erroneous conclusion. It can hardly be debated, however, that more and more segments of our economy trot to Washington to see what the "Great White Father" has in store for them. Now many educators are eagerly joining the parade.

It's about time that higher education concerned itself with doing its own financing. Its stride may be faltering, but it will be walking on its own feet.

Questions and Answers

Food and Labor Costs

Question: What is the average food and labor cost percentage for a college cafeteria?—G.S., Minn.

ANSWER: Though it is difficult to arrive at any standard, the following data obtained in a survey of eastern colleges by Dr. Mary deGarmo Bryan, head of institution management at Teachers College, Columbia University, may be of help.

The average food cost percentage of those reporting was 54.3; range 30 to 80 per cent. The college reporting the 80 per cent turned in a very brief report. It said, "80 per cent food cost; 33 per cent labor. We lost money."

Labor costs averaged 28.4 per cent and ranged from 11.5 to 62 per cent.

There is wide variation in the items of expenses included in labor cost. Half of the colleges include administrative salaries. Only 33 per cent include employees' meals. A small group (20 per cent) include compensation insurance, and vacation pay reserve (30 per cent). All other expenses ranged from 6.4 to 45 per cent. Profit averaged 4.6 per cent, from minus 13 to plus 33 per cent.

One-half of the colleges have increased charges for food this current year, the increases ranging from 1 to 25 per cent, with an average of 10 per cent.

Managers need norms against which to check their operations. Such norms are fairly well established in the commercial food service field, in which all operating costs, including rent, plus profit, are covered by sales. For example, commercial cafeterias at the present time aim at a food cost of 43 to 45 per cent of the income; labor, 28 to 33 per cent. Service restaurants in the high-priced bracket aim at a food cost of 30 to 37 per cent; in the medium-priced bracket, 35 to 42 per cent, and in the low-priced bracket, 40 to 45 per cent. The wages in those service restaurants range from 27 to 30 per cent. If these major items exceed these ranges, the operator usually goes out of business. The 1948 and 1949 bulletins of the New York State Res-

taurant Association deal with methods of controlling these costs. The 1949 bulletin considers equipment, wage policies, employee incentives, and other means by which labor costs may be controlled with the rapidly rising wage rates.

In school cafeterias, which are regarded as teaching laboratories, food cost averages 60 per cent; labor, 30 to 35 per cent. In these institutions charts of accounts are similar in all important respects and many overhead costs, including management, are carried on in the regular school budget.

The ranges at the present time for important food groups are 28 to 34 per cent for meat and poultry; 20 to 25 per cent for fresh, canned and frozen fruits and vegetables; 20 to 25 per cent for milk and dairy products other than butter, as it is usually included in the remainder of the expenditure as one of the fats.—**HAROLD W. HERMAN**, *managing editor, College and University Business*.

New Chemical Fly Killer

Question: Is it possible that DDT will lose its potency as a fly killer? If so, what is the best method evolved?—R.W.T., Okla.

ANSWER: If DDT has to be replaced as a fly killer, benzene hexachloride seems to be the logical choice. This is the opinion of Dr. R. B. March and Dr. R. L. Metcalf of the entomology division in the college of agriculture, University of California, after an extensive study of the effects of DDT and other chemicals on the house fly.

Certain strains of flies have developed a resistance to DDT that makes complete control virtually impossible. Of the other chemicals tested, benzene hexachloride gave the best results. It controls flies completely, and about five times as fast as DDT.

Benzene hexachloride wettable powders come in three concentrations, containing 6 per cent, 12 per cent, and 25 per cent of the toxic ingredient. The 6 per cent concentration is cheapest but has an objectionable odor. The 12 per cent was used at a dosage of 17

pounds in 100 gallons of spray by 150 dairies in southern California, with no complaints as to odor, and accomplished effective fly control for three weeks during the hottest summer weather, and for two months during the cooler fall months.

However, the two University of California entomologists advise against the use of benzene hexachloride in milkrooms and near milk containers.

Food Service Institute

Question: Will Northwestern University and COLLEGE AND UNIVERSITY BUSINESS sponsor a College Food Service Institute in 1949?—C.R., Calif.

ANSWER: In response to a unanimous request from delegates attending last year's College Food Service Institute, plans are now being formulated for the 1949 College Food Service Institute. Institute sessions again will be held at the Knickerbocker Hotel in Chicago on July 25, 26 and 27. Colleges or universities will be limited to a maximum of two delegates. Details relative to registration fee, program and other pertinent data will be published in forthcoming issues of COLLEGE AND UNIVERSITY BUSINESS.—**H. W. H.**

Radiant Heating System

Question: Are repairs frequent or expensive on a radiant panel heating system? Why are wall radiant panels seldom used? Can additions be made to a radiant panel system?—J.B., Mo.

ANSWER: (1) No. A well designed radiant panel system proper should require no maintenance. Boiler and pump are maintained as in a conventional system. (2) If outside walls are warmed, heavy insulation is required to minimize the amount of heat lost to the outside, and if inside walls are warmed, the room is divided into a cold zone on the outside and a warm zone on the inside. (3) Yes. The installation of the additions to a radiant panel system will be facilitated if the original design allows extra capacity for the addition in the mains, pump and boiler, to the same extent as any other heating system.

NEWS

New U.S. Commissioner of Education Named . . . Revise V.A. Regulations to Clarify College Costs . . . College Fire Kills Nine . . . Millions Requested for Medical Education Assistance . . . Recommends Simplifying Record-Keeping

Washington Correspondent: BEN BRODINSKY

College Professor New U.S. Commissioner of Education

WASHINGTON, D.C.—Earl James McGrath, a resident of Iowa but at present professor of education at the University of Chicago, was named U.S. Commissioner of Education by President Truman on February 17.

Mr. McGrath's name was sent to the Senate for confirmation. Since his nomination has already been endorsed by the Iowa senators, confirmation is simply a question of routine.

Born in Buffalo, N.Y., Mr. McGrath received his B.A. and M.A. degrees from the University of Buffalo. He also taught there. During the war he was in charge of the educational services section, Bureau of Naval Personnel. He also served on the War Manpower Commission and was consultant for the National Roster of Scientific Personnel.

Within recent months he has been active on the executive board of the N.E.A.'s department of higher education. He is also friendly with officials of the American Council of Education.

Mr. McGrath assumes the \$10,000 federal educational post at a time when Congress is considering legislation to raise the salary to \$17,000.

Record Contributions to Independent Colleges

NEW YORK CITY.—Despite the fact that many educators complain that large gifts are not available to colleges as a result of current taxes, Dr. Arnold C. Marts, head of a New York fund raising concern, states that this is not the case. Dr. Marts reported



that \$150,000,000 was contributed to independent institutions in 1948, as against the previous high of \$139,000,000 in 1929-30.

There were many substantial individual gifts reported also, according to a statement by Dr. Marts. Gifts and bequests to colleges, he added, from only forty-six individuals totaled \$75,363,000. These ranged from individual amounts of \$25,000 to \$40,000,000.

Review Proposal for Scholarship Program

WASHINGTON, D.C.—The bureau of the budget is reviewing a proposal submitted by the U.S. Office of Education for a study on the need for scholarships and the methods of administering them when authorized by Congress.

If approved by bureau officials, the plan would be sent on to Congress with a request to appropriate about \$400,000 to carry out the study.

Until such a study is completed, little hope is held for bills in Congress that seek nationwide federal scholarship programs.

In its study, the U.S. Office of Education will attempt to map the methods of administering federal scholarships rather than to determine the amounts Congress is to appropriate for this purpose.

"For example, we have to determine whether scholarships are to go to the most capable students or to those who have the greatest need for financial assistance," said one U.S. Office of Education official. "Another question to be decided is whether the scholarship program is to be administered through direct contacts with the institution or through a centralized state educational agency. It will probably take several months before we can resolve these questions and present a comprehensive proposal to Congress."

Criticizes Divided Rule of University System

ALBANY, N.Y.—Dr. Paul Klapper, president emeritus of Queens College and a member of the board of trustees of the State University of New York, criticized the attempt of the state board of regents to have the direct administration of the thirty-two publicly supported state institutions put under the control of the board of regents.

Dr. Klapper contended that "the specter of dual control which the regents have raised is indicated by their proposal to develop two systems of higher education—the one consisting of the present private and public institutions under the regents; the other, the new institutions under the trustees. Under such a plan, duplication of services, competition for public funds, and uncoordinated effort are inevitable."

Negro College Fund Reaches \$1,066,112

NEW YORK CITY.—Exceeding all previous campaign records, the United Negro College Fund in its fifth annual appeal has raised \$1,066,112.70 to help thirty-two private accredited Negro colleges and universities meet current operating expenses and improve educational facilities for their students. William E. Cotter, counsel for Union Carbide and Carbon Corporation, was chairman of the fund's 1948 campaign. Additional funds received for special purposes bring the total to \$1,145,896.85.

Gifts from individuals represent more than 55 per cent of the total amount received, while 2500 business corporations and small business firms contributed more than \$300,000 to the fund's 1948 campaign. Foundations gave nearly \$200,000. Forty-four states, two territories, and three foreign countries are represented in contributions.

NEWS

Asks \$5,000,000 Yearly for Medical Education Assistance Trust Fund

WASHINGTON, D.C.—A student loan fund to help young men and women continue their medical education is proposed in a bill introduced by Rep. Smathers (D.-Fla.).

Rep. Smathers suggests that Congress appropriate \$5,000,000 each year for a medical education assistance trust fund. The student would be permitted to borrow up to \$1750 a year at 2 per cent interest.

Rep. Smathers' bill (H.R. 1779) calls for the U.S. Commissioner of Education to act as trustee of the fund. The commissioner would pay tuition and other expenses directly to the institution which the student attends. A subsistence allowance of not more than \$75 a month would be paid directly to the borrower.

Students would be free to apply for admission to any institution they choose; institutions in turn would be left free to accept or reject applicants.

"We have received many letters from undergraduates all over the country," said Rep. Smathers, "who wish to become doctors but do not have the means for an education. The loan program I propose would cost the federal government virtually nothing. We carried on similar programs during the depression and the last war with very few dollars lost as a result of student loans."

Billions Now Devoted to Philanthropy Not Enough

NEW YORK CITY.—If the total announced needs of higher education are to be met, contributions to this cause must be increased by at least \$100,000,000 a year for the next ten years, according to estimates presented in "The Yearbook of Philanthropy," edited by John Price Jones and published recently. In addition, it is estimated that secondary education will need an additional \$44,000,000 annually in the same period.

The sum of \$3,000,000,000 now devoted to philanthropy annually does not meet existing needs, which have been announced in varying fields of philanthropy. A summary of needs for higher education, secondary education, hospitals, medical education, social work, and religion indicates that for the next ten years, if present re-

quirements in these fields are to be met, American philanthropy will have to be stepped up by some \$853,000,000 a year.

New V.A. Regulations Clarifying Costs Expected by Midyear

WASHINGTON, D.C.—Methods of computing costs of instruction for veterans attending public institutions are again under review by the Veterans Administration.

The V.A. promises new regulations by midyear to clarify puzzling questions governing contracts between V.A. and nonprofit educational institutions.

Two of the more important questions that the V.A. promises to answer are:

1. Should federal grants to colleges—made under permanent grant-in-aid laws—be deducted before the schools begin computing the costs of instruction provided to G.I. students?

2. What proportion of time of instructors teaching veterans should be included in computing costs under the G.I. bill?

These questions demand immediate clarification because the general accounting office is auditing payments the V.A. made to institutions. In one instance, that involving the Iowa State College at Ames, the accounting office claims the government has overpaid more than half a million dollars. Charges by the government of similar overpayments are expected to increase as audits continue, unless methods of computing costs of instruction are clarified.

First discussions on the effects of the audits were held at a meeting February 13 among V.A. officials, the advisory committee to the administrator of Veterans Affairs, and a joint committee representing the National Association of State Universities and the Association of Land-Grant Colleges and Universities.

Following the meeting, Gen. Carl Gray, administrator of Veterans Affairs, said: "College representatives present stated that they welcomed the audits and that if either party to the contracts between V.A. and educational institutions finds, as a result of the audit, that compensation for veterans' education is out of line, prompt readjustment should be made."

Modular Coordination Expected to Reduce Construction Costs

WASHINGTON, D.C.—Architects, manufacturers of building materials, and the government are getting together to make "four inches" the key factor in a drive to help reduce building costs and make construction more efficient.

Four inches is the basic ingredient in a system of manufacturing and erecting building materials that promises to place the construction industry on a mass production basis. Its name is "modular coordination."

According to the American Institute of Architects, the theory of modular coordination is this: if the controlling dimensions of all basic building units could be established at sizes of four-inch increments, then all construction could be composed of multiples of that four inches—such as 8, 12 or 16 inches, or 3 feet 4 inches, and so forth. The four-inch dimension or multiple includes the actual building material, plus one joint.

Vast strides have been made in acquainting architects, manufacturers, distributors and contractors with the implications of "modular coordination." Materials which adhere to this principle have been coming on the market in increasing quantity. At one time there were 30,000 types and sizes of metal windows, but this number has now been reduced to 300.

Most dramatic use of the method has been in the manufacture of windows, doors, kitchen cabinets, bricks and other masonry products.

An advantage of the modular coordination principle is that a builder does not have to wait until all manufactured products are using the four-inch standard. It can be employed profitably in combination with more conventional technics.

Architects and producers are cooperating with the Housing and Home Finance Agency in acquainting the public with the new methods of four-inch construction. Booklets will be published this year by the government agency for property owners, architects, designers, contractors and builders.

The American Institute of Architects is urging architects familiar with modular coordination to discuss its advantages with builders, contractors and school officials who plan to build.

Makes Recommendations for Simplifying Filing and Record-Keeping

WASHINGTON, D.C.—Following a study of filing and record-keeping problems, the Hoover Commission made the following recommendations which have applications to schools and colleges:

1. Remove old files and records to more economical storage space rather than keep them in expensive office space.
2. Destroy or otherwise dispose of papers and documents no longer needed.
3. Consolidate scattered filing systems, a step which in many instances will reveal duplicate records.

The commission was named by Congress to study the organization of the executive branch of the federal government.

In its report, the Hoover Commission recommends that an institution employing fifty persons or less should use 3 to 6 per cent of its employees for record-making and record-keeping; an institution employing fifty-one to 100, 4 to 7 per cent; an institution of 101 to 200, 4 to 8 per cent; an institution employing 201 to 300, 5 to 10 per cent.

"There is a widespread belief that every record made or received must be filed," says the commission. "This proves to be untenable due to modern office practices which make duplication of documents easy through the overuse of carbon paper, mimeograph and the stencil."

One Building for All Student Organizations

TROY, N.Y.—Plans for demolition, renovation and rebuilding work costing approximately \$400,000, including the erection of a new building at the center of the campus, have been approved by the Russell Sage College board of trustees. The chief project will be a building for general activities to be erected on the site of Darby House, college classroom and faculty office building.

Among the college units that will eventually be housed in the new building are the admissions office, bookstore and post office, all now in Gurvey Hall. One objective of the project is that the building shall become headquarters for all student organizations.

KENYON COLLEGE FIRE KILLS NINE



GAMBIER, OHIO.—Fire sweeping through the 122 year old Kenyon College residence hall, known as Old Kenyon, early Sunday morning, February 27, killed nine students and injured twenty-two others, according to reports available at the time this magazine went to press. Three students died shortly after the fire, with six others missing and presumed to be dead.

Property damage was expected to exceed \$500,000. The building was insured, but not sufficient coverage was provided for complete replacement of the building, according to W. E. Camp, treasurer of the college.

The residence hall was a three-story sandstone building erected in 1827, three years after Kenyon College was chartered. It was reputed to be the oldest example of collegiate Gothic architecture in the United States.

The fire apparently started from the fireplace in the first floor lounge of the building's middle wing, which had been the scene of a dance earlier in the evening. Firemen reported that the fireplace had been filled with litter from the party, including cardboard and paper containers. It is thought that a smoldering cigaret may have touched off the blaze which ignited furnishings in the lobby.

The flames burned up through an open stairwell, broke through the roof and spread across the roof to the structure's east and west wings, sepa-

rated from the middle wing by fire walls, which, under the circumstances, were of no protection.

At least 112 of the 120 residents were in the building at the time the fire broke out, most of them asleep in their rooms. Escape by front doors was cut off, and corridors were so smoke-filled that windows provided the only possible exits.

The blaze was fought by the campus fire department, the Gambier village fire department, and apparatus sent from Mount Vernon and Danville, Ohio. The building was a total loss. Pres. Gordon K. Chalmers of Kenyon College said that Old Kenyon would be rebuilt.

Colleges throughout the Middle West, and even as far away as Pomona College on the Pacific Coast, offered to provide the necessary equipment to replace that lost in the fire, according to a statement from Mr. Camp.

The Red Cross established a blood bank for the fire victims at near-by Mount Vernon. Student and faculty wives served as volunteer nurses immediately following the fire.

Classes were conducted as usual on the Monday following the fire, although many students were attired in borrowed clothes and were without books. Most of those housed in Old Kenyon lost all their personal property. Students are being accommodated temporarily in war surplus barracks, in private homes of citizens in the village of Gambier, and in remaining dormitories.

University of Chicago Reports High Yield on Endowments

CHICAGO. — Despite the highest income in its history for endowment funds and fees from students and patients, the University of Chicago required \$1,506,000 from reserves to balance its total budget of \$31,586,000, according to the report of Comptroller Harvey C. Daines for the 1947-48 fiscal year.

Also, to prevent any delay in its vital research projects on cancer and atomic energy, the university heavily underwrote from free funds functioning as endowment, and from reserve funds, a building program largely for these two purposes. In the expectation that in the next few years the importance of the work will produce from donors and industrial sources the necessary gifts to replace these capital funds, the university has applied a total of \$8,540,000 for buildings.

The comptroller's report emphasizes that the free funds functioning as endowment were not so restricted by donors but represent gifts received in other years for expendable purposes and assigned to endowment by the board of trustees.

Profitable management of the endowment funds of \$72,344,000 is indicated by the return of 5.77 per cent on book value last year. This return, if not the highest, is among the highest rates realized on any institutional investments in the country, according to Mr. Daines. Endowment income last year was \$4,161,000. In 1929, the peak year of return, the rate was 6.2 per cent. A variation of 1 per cent in rate of return is at present equivalent to \$725,000 in the university's annual income.

Enlarge Enrollment to Meet Rising Costs

BENNINGTON, VT. — Bennington College will help to meet its problem of increased operating costs by enlarging the student body by fifty to a new total of 350, according to an announcement by Pres. Frederick Burkhardt. The college's board of trustees has decided to combine this action with a smaller raise in fees, rather than to try to meet increased costs entirely by an increase in fees. The new schedule of fees adds \$100

to the yearly tuition, bringing the total to \$1200. Charges for room and board will be \$750 for double rooms and \$900 for single rooms.

When Bennington College was started in 1932, the fees paid by each girl covered the whole cost of education. This plan worked well until 1946. "Then the present inflationary spiral began," Dr. Burkhardt stated, "and with it came Bennington's first deficit." If the original plan were still followed today, he pointed out, and if the student body were not enlarged, it would cost each student \$2300 a year.

London to Build 34 Special Colleges

LONDON, ENG.—As a result of action taken by the London County Council, thirty-four special colleges are to be created in the metropolitan area of London at a cost of \$56,000,000. They are intended for young people over school age but under eighteen and not in full-time attendance at school.

Each college will be sited on 2 acres of land and will provide facilities permitting attendance of 2500 students on a one day a week basis. The students will be expected to take compulsory courses in social studies, physical education, and English for one day in each week of the school year.

Memorial to Former Athletic Commissioner

WILMINGTON, OHIO.—Construction will be begun this spring on the H. R. Townsend Memorial Field on the Wilmington College campus, Dr. Samuel D. Marble, president of the college, announced recently.

The athletic field and stadium will be constructed from funds raised by more than 300 Ohio high schools as a memorial to Ohio's first high school athletic commissioner, the late Horace R. Townsend. Most of the donations were raised by the playing of benefit athletic events by the schools.

Wilmington College was selected as the site of a permanent monument to the man who did more than any other single individual to place high school athletics in this state on their present high plane because Mr. Townsend had received his training there.

At the time of his death he was serving as chairman of the board of trustees.

Urges Use of Oil Money for Educational Purposes

WASHINGTON, D.C. — Harold L. Ickes, former Secretary of the Interior, declared that all funds received from the sale of tideland oil should be put into a federal trust fund to expand and improve public education.

The former secretary, who was national wartime administrator for oil and petroleum, believes that the tideland oil reserves might yield more than \$27,000,000,000.

In order that this sum may be used for educational purposes, Mr. Ickes urged that the oil reserves remain under federal control. He charged that if the states assume control over the tidelands, "private oil interests would eventually get their hands on them."

"God has provided the riches by which we can become an educated nation," says Mr. Ickes. "Nor will it cost the treasury a cent, if we create the gigantic trust fund from the money yielded by our undersea oil."

N.E.A.'s Annual National Conference April 4-7

WASHINGTON, D.C. — Discussions on current trends and policies in financing higher education will feature the fourth annual national conference sponsored by the department of higher education of the N.E.A.

The conference will be held in the Congress Hotel, Chicago, April 4-7. Administration officials representing all phases of college and university problems will participate in thirty discussion groups.

Among topics for study are:

Improving and extending the physical plant; internal organization and administration of a college; enrollment trends; admissions policies and procedures; policies of intercollegiate athletics; administration of student personnel programs, and the federal government and higher education.

Members of the planning committee include: J. Kenneth Little, University of Wisconsin, chairman; Felton G. Clark, Southern University; H. H. Davis, State University of Iowa; Ruth Eckert, University of Minnesota; Edward K. Graham, Washington University; M. T. Harrington, Texas A. and M. College; Mrs. Herbert Hawkes, Mills College, and O. John Hollis, University of Oregon.

Accused of Fraud in War Surplus Deals

NEW YORK CITY.—Announcement was made recently that a complaint charging fraud in obtaining and reselling war surplus materials has been filed in the Southern District Federal Court of New York against Raymond H. Jackman, formerly employed as an assistant purchasing agent at Syracuse University.

The federal government's action is the first concrete result of an inquiry now underway by the F.B.I. and the Federal Works Agency into complaints that war surplus goods acquired by educational institutions or their purchasing agents were being re-sold fraudulently.

According to the complaint, Jackman purchased a large quantity of drugs with the commercial value of \$76,068 from the War Assets Administration on May 11, 1948, at a 95 per cent discount, or for a total of \$3803. The federal government claims that Jackman had filed a certificate that the drugs were to be used in the laboratory, medical and infirmary departments of the university. The complaint alleged that Jackman re-sold the drugs to Louis L. Center, doing business under the name of Merchandising Specialists, for \$21,615 and that Center sold them again for \$51,030.

Educators Censor College Stand of Mayor O'Dwyer

NEW YORK CITY.—Mayor O'Dwyer recently summoned the twenty-one members of the board of higher education to the City Hall and rebuked them for their anticipated choice of a new Queens College president. It was said to be a move unprecedented in the history of the board of higher education in New York.

It is reported that for several months the majority of the board had been backing the candidacy of Dr. Bryn J. Hovde, president of the New School for Social Research, for the presidency of Queens College. A smaller group has been interested in elevating Dr. Margaret V. Kiely, a former academic dean, who became acting president upon the retirement of Dr. Paul Klapper a year ago.

The action taken by Mayor O'Dwyer was severely censored by many persons in higher education. Dr. Alfred D. Simpson, professor of education at

Harvard University and vice president of the American Association of School Administrators, stated that the mayor "ought to keep his hands out of the education system." He declared that the choice of a college president was not the business of a politically elected mayor, but of an independent education board.

In a press conference in San Francisco, Dr. Willard E. Goslin, superintendent of schools of Pasadena, warned that Mayor O'Dwyer's action could not be accepted by the country's educators. He stated that "the American people and their representatives must never forget that an independent school is essential in a democracy. We certainly have had enough demonstrations around the world to know what a politically controlled school system can do to the people."

GIFTS AND BEQUESTS

• **Cornell University's** president, Dr. Edmund E. Day, announced receipt of a gift of securities estimated to be worth about \$1,000,000 from Floyd R. Newman, Cleveland petroleum industrialist, for the Cornell University laboratory of nuclear studies. The university's trustees have voted to name the laboratory for the donor.

• **Illinois Wesleyan University** officials have announced receipt of a gift of \$10,000 from the National Institute of Health to be allocated to the university's cancer research program.

• **Baker University** announced receipt of a gift of \$9,165.87 from the estate of Miss Lois Rostock, Baker alumna, who was a high school teacher in St. Joseph, Mo., for many years.

• **Columbia University's** President Eisenhower announced the establishment of a \$100,000 endowment fund provided by the Charles Hayden Foundation of Boston. The fund will be used to provide scholarships for young students of ability who otherwise would lack financial resources for college study.

• **University of Illinois's** comptroller, Lloyd Morey, reports the receipt of \$697,790 in grants for research during the last year from private industry and organizations, and an additional \$2,427,589 from the federal government for special research and training projects.

• **Ohio State University** recently received a grant of \$10,000 from the du

Pont Company for support of chemical research during the 1949-50 academic year.

• **Colby College's** president, Dr. J. Seelye Bixler, announced recently receipt of a gift of \$300,000 from Dr. George C. Averill of Waterville, Me., to the Mayflower Hill development fund. Dr. Averill's gift will be toward the completion of Colby's new campus.

• **Northeastern University** announced recently the receipt of a new grant of \$30,000 from the Charles Hayden Foundation, which now gives Northeastern University income from a fund of \$100,000 to be used for scholarships for freshmen from many Greater Boston high schools.

• **United Negro College Fund, Inc.,** New York City, established a record high of \$1,066,112 in its campaign. From this money thirty-two member colleges will be aided.

• **Dr. Matt L. Ellis**, president, announced recently that the cash receipts in the **Hendrix College** campaign now exceed the million dollar goal. Receipts include approximately \$785,000 from the campaign conducted by Methodist churches of the state, \$200,000 from the General Education Board of New York, and \$12,600 from the Methodist Church's national Crusade for Christ campaign.

• **Notre Dame** officials have announced receipt of a gift of \$25,000 to be used for construction of an electronics laboratory in the new science building at the university. The gift was received from the Kresge Foundation in Detroit. A total of \$614,939.42 was received from alumni and friends of the university during 1948.

NAMES IN THE NEWS



Dr. Clarence C. Stoughton, stewardship secretary of the United Lutheran Church in America and executive director of the Lutheran Laymen's Move-

ment for Stewardship, has been appointed to the presidency of Wittenberg College, Springfield, Ohio, to succeed **Dr. Rees Edgar Tulloss**, who will retire August 31 after twenty-nine years of service. Dr. Stoughton will be the first layman to become president of Wittenberg in its 104 years of existence.



Dr. R. Clyde White, professor of public welfare in the school of applied social sciences at Western Reserve University, has been appointed director of

institutional research. In this position he will make studies of educational programs and projected plans in relation to the development of the university's service and physical facilities.

Donald M. Mackenzie, dean of Blackburn College, has been named acting president to succeed **Dr. Robert W. McEwen**, who was appointed to the presidency of Hamilton College recently.

Howard A. Thompson, dean of the faculty at Sampson College, has been appointed to the administrative staff of Cornell University as assistant to **Asa S. Knowles**, vice president for university development.

Mark E. Howlin, graduate of Cornell University and a member of the Cornell Hotel Association, has been named manager of the campus union at Alfred University. He assumed the duties of his new post in February.

Harold Sanford Wood, vice president of Oberlin College, will succeed **Bradley Tyrrell** as vice president of Beloit Col-



H. S. Wood



B. Tyrrell

lege when Mr. Tyrrell retires on June 30. Vice president of Beloit since 1938, Mr. Tyrrell served as acting president from 1942 until 1944 following the death of President Irving Maurer. Mr. Wood will report to Beloit on May 1 to serve as vice president elect for two months before assuming his new office.

C. Clement French, dean and head of the department of chemistry at Randolph-Macon Woman's College, has been named vice president of Virginia



Polytechnic Institute, Blacksburg, Va. He assumed the duties of his new post in February.

Charles A. Putnam has been appointed chief engineer of Colorado Woman's College. As a heating engineer, he has been responsible for installation of many heating systems in Denver schools, hospitals and other institutions.

Dr. E. Newbold Cooper has been named vice president of Girard College, Philadelphia, according to a recent announcement by **Dr. Merle M. Odgers**, president of the college. Dr. Cooper's appointment becomes effective next September.

Robert L. Jackson, director of admissions at Colorado College, has accepted appointment as director of admissions at Oberlin College and will report to his new post in Oberlin, Ohio, on June 30.

Charles W. Greenough, former budget commissioner of Massachusetts, has been appointed business manager for the medical area of Harvard University, according to a recent announcement by **Edward Reynolds**, administrative vice president of Harvard.

Lawrence Huber, greenskeeping superintendent of the Brookside Country Club near Columbus, Ohio, has been appointed superintendent of the Ohio State University golf courses. He succeeds **John McCoy**, who resigned from the university position last December.

Norman P. Auburn, vice president and dean of administration at the University of Cincinnati, will serve as acting president during the leave of absence granted to **Raymond Walters**, president. Dr. Walters, on a special mission to Japan to serve as a consultant to the army's education division, expects to return to Cincinnati sometime in April.

Ellen C. Sabin, president of Milwaukee-Dowder College from 1895 to 1925, died recently at 98 years of age. Pioneer in education, she was named in 1887 as "the first woman superintendent of schools in Portland, Ore."

DIRECTORY OF ASSOCIATIONS

Association of College and University Business Officers

Central Association

President: Herbert Watkins, University of Michigan; secretary-treasurer: L. R. Lunden, University of Minnesota.

Convention: Joint meeting with Western Association, June 26-28, Denver.

Eastern Association

President: Boardman Bump, Mount Holyoke College; secretary-treasurer: Irwin K. French, Middlebury College.

Southern Association

President: W. T. Ingram, Alabama Polytechnic Institute; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Annual Meeting: April 29-30, Berea College, Berea, Ky.

Western Association

President: Paul A. Walgren, University of Southern California; secretary-treasurer: George A. Hall, California Institute of Technology.

Convention: Joint meeting with Central Association, June 26-28, Denver.

Schools for Negroes

President: V. D. Johnston, Howard University; secretary: L. H. Foster Jr., Tuskegee Institute.

Association of College Unions

President: Vernon L. Kretschmer, University of Illinois; secretary-treasurer: Edgar A. Whiting, Cornell University; editor of publication: Porter Butts, University of Wisconsin.

Convention: April 27-30, Broadmoor Hotel, Colorado Springs, Colo.

Association of Physical Plant Administrators of Universities and Colleges

President: William F. Holman, University of Minnesota; secretary-treasurer: A. F. Gallistel, University of Wisconsin.

Convention: May 16-18, University of Arkansas, Fayetteville.

American College Public Relations Association

President: Max E. Hannum, Franklin and Marshall College; secretary-treasurer: Edward P. Vonderhaar, Xavier University, Cincinnati.

Convention: April 26-30, Washington Hotel, Washington, D.C.

College and University Personnel Association

President: Donald E. Dickason, University of Illinois; secretary-treasurer: Marion Darr, Purdue University.

National Association of College Stores

President: John H. Jenkins, St. Louis University; executive secretary: Russell Reynolds, 189 West Madison Street, Chicago.

Convention: April 27-30, Los Angeles.

National Association of Educational Buyers

President: Charles W. Hoff, University of Omaha; secretary-treasurer: Bert C. Ahrens, 45 Astor Place, New York, N.Y.

Convention: May 11-14, Hotel Statler, Boston.

PRODUCT INFORMATION

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Wide Field Microscope
- 823 Gar Wood Industries, Inc.
Refuse Collection Unit
- 824 International Business Machines Corp.
Electric Time System
- 825 Presto Recording Corp.
Portable Microgroove Recorders
- 826 Joseph Dixon Crucible Co.
Enduro Pencil Sharpeners
- 827 Bobrick Manufacturing Corp.
Liquid Soap Dispenser
- 828 A. B. Dick Co.
Stencil Sheets
- 829 A. S. Aloe Company
Moduline Laboratory Furniture
- 830 Ampco Corporation
Film Splicer
- 831 Frigidaire Div.
"Meter-Miser"
- 832 Panqborn Corporation
Blackboard Reconditioner
- 833 Ice-Flo Corp.
Ice Cube Maker
- 834 Gold E Mfg. Co.
Aluminum Slide Binder
- 835 General American Transportation Co.
Meladur Plastic Tableware
- 836 Hill-Rom Company
Bedroom-Living Room Unit
- 837 W. M. Welch Mfg. Co.
Lighter for Bunsen Burners
- 838 Norton Door Closer Co.
Aluminum Door Closer
- 839 L. C. Smith & Corona Typewriters Inc.
Vivid Liquid Duplicator
- 840 Amena Society
Stainless Steel Freezer Line
- 841 Solar-Sturges Mfg. Co.
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Steam Tables
- 844 Burroughs Adding Machine Co.
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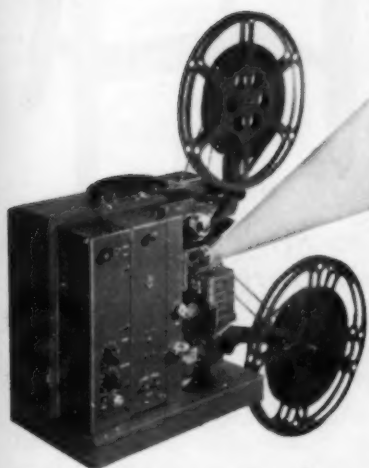
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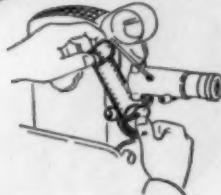
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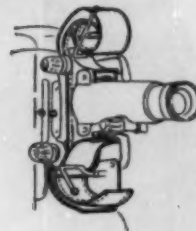
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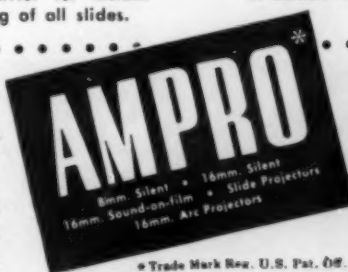
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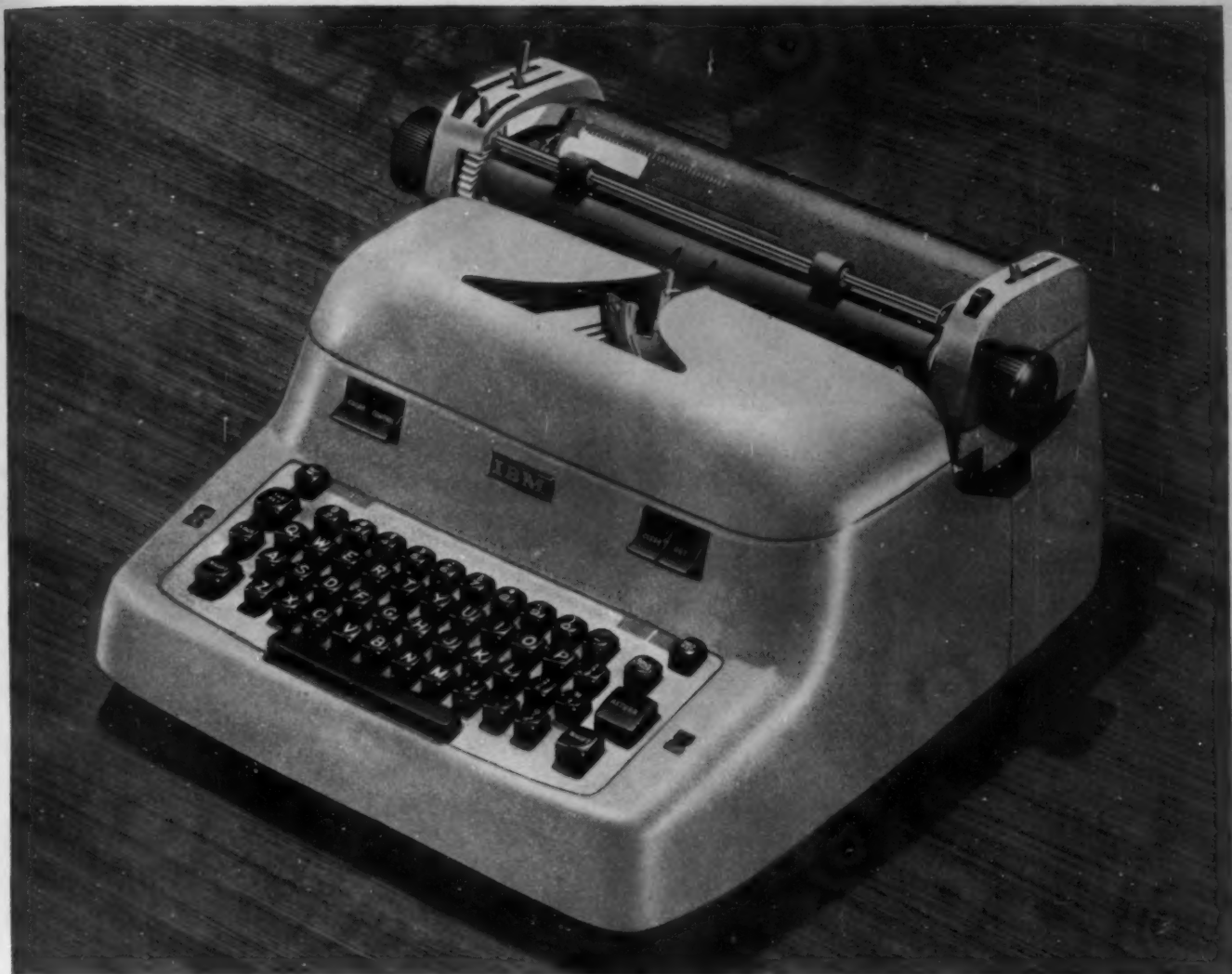
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*"I'm the Student
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"...and with good reason, too! When my Lit Prof returned our exams today, he put the heat on me about getting another D. 'I never knew you were that stupid, Dick,' he said. But ever since my classes moved into noisy old Grey Hall, my grades have been dropping. We sit and listen to an echo instead of a college lecture. You simply can't *hear* what's said in those classrooms, much less concentrate or take good notes. And that's just what I told Professor Brooks!"



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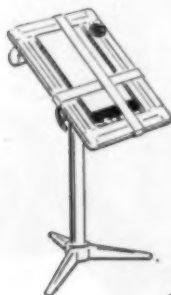
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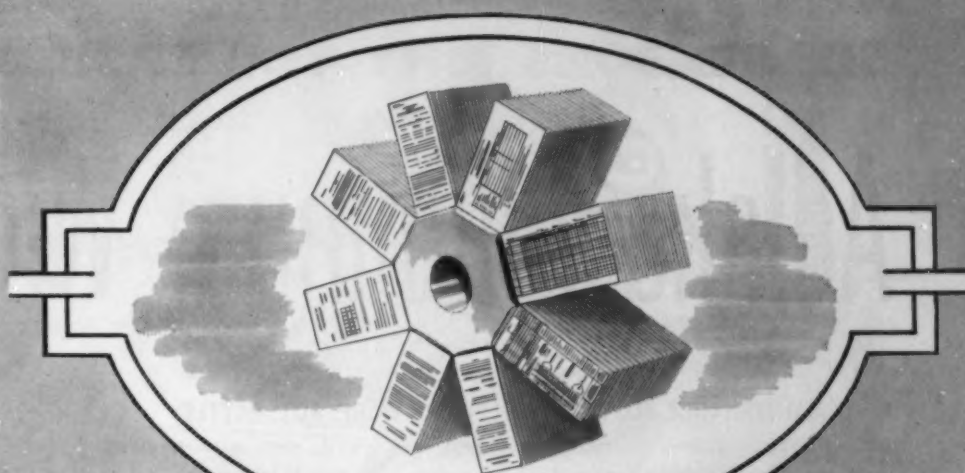
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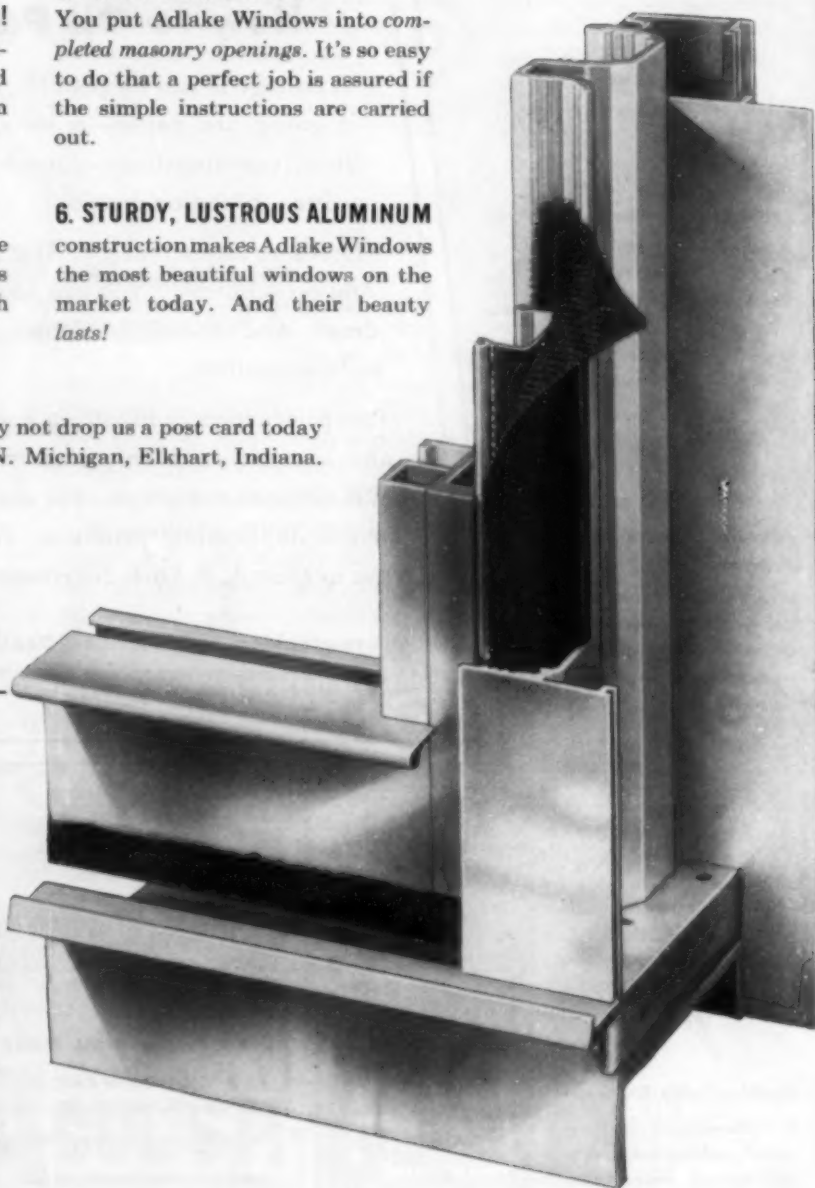
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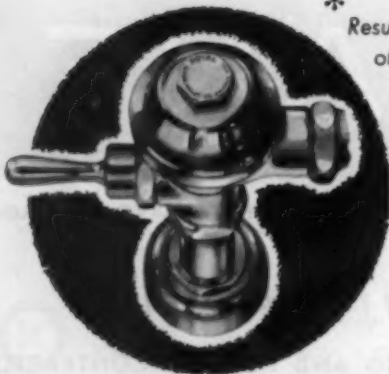
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MSC's new steam generating plant (left), and a typical run of Ric-wil Insulated Piping.



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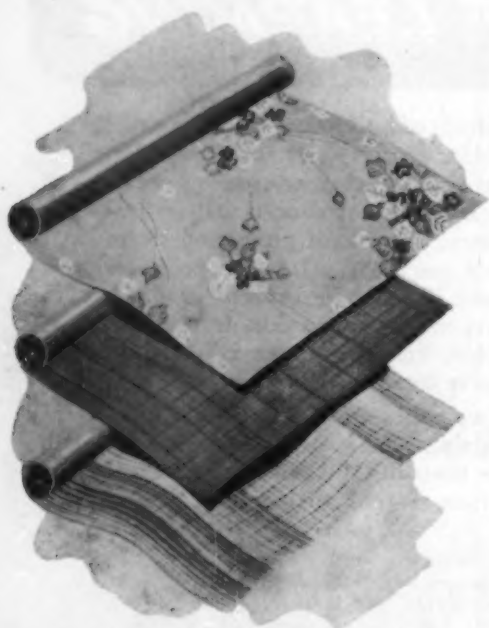
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FABRON's sturdy canvas backing and layers of plastic provide a high-strength backing that prevents small cracks from forming and resists even heavy structural cracks. Should plaster repairs become necessary, simply peel down the FABRON, patch the plaster and paste the FABRON back in place.

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Several thousand schools, universities, hotels and hospitals have found FABRON the most economical wall and ceiling treatment obtainable. Get the facts NOW — so you can include FABRON in next summer's redecorating program. We'll gladly submit patterns and cost estimates if you will give us the details of your program. No obligation, of course!

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The canvas-plastic-lacquer wall covering

COLLEGE and UNIVERSITY BUSINESS



WOOD

*Unexcelled for
friendly warmth*



CARROM FURNITURE CRAFTSMEN

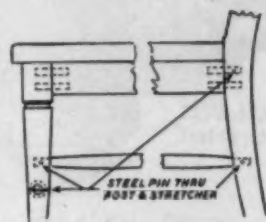
Build FOR THE DECADES

Attractive, well-made Wood Furniture combines, to a high degree, both literal and figurative warmth and friendliness. From a practical, physical standpoint wood, because it is to a great extent a non-conductor of heat, has a friendly, comfortable "feel" that invites use. But over and above this . . . wood possesses a natural emotional warmth that is normally generated by intimate, friendly things.

Carrom Wood Furniture possesses, in a great measure, these characteristics of "Friendly Warmth" . . . appealing to the natural instincts of the average person. This is especially desirable for institutional use

where the individual finds himself more or less remotely situated from home and friends. Both physically and psychologically, he enjoys the gracious and beneficial influence of "friendly warmth", generated by the ageless spirit and fibre of WOOD!

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TO POSTS**

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When You Want **LOW COST** **TEMPERATURE** **CONTROL**

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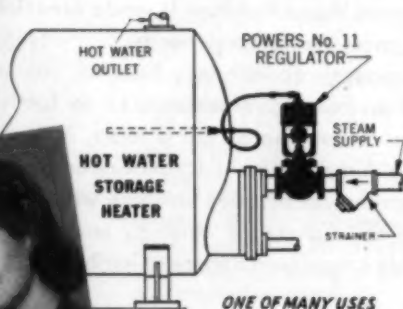
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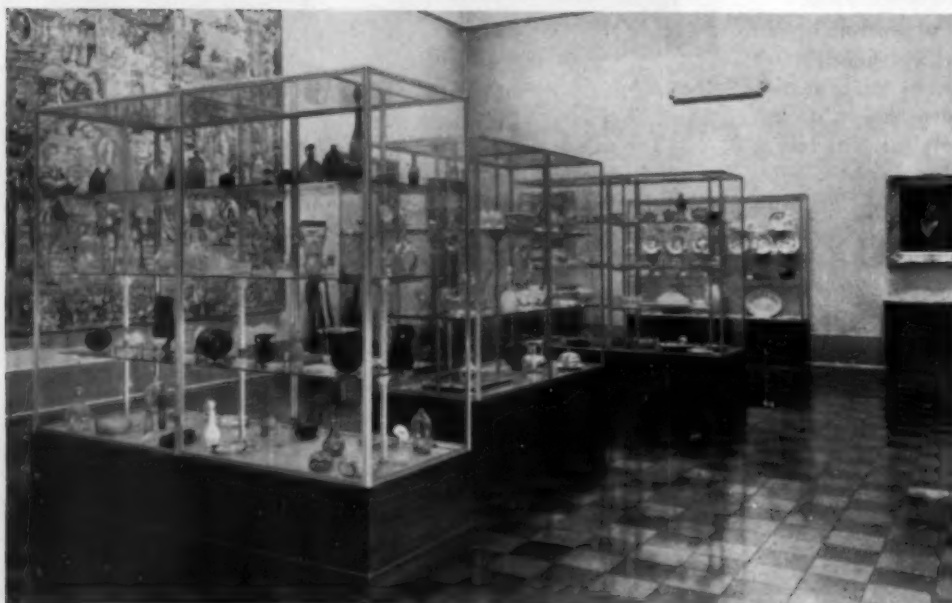
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BEAUTY	A
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But see for yourself...see your nearest Simmons distributor or write directly to

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Double Deck Bed demounts to make two single beds.

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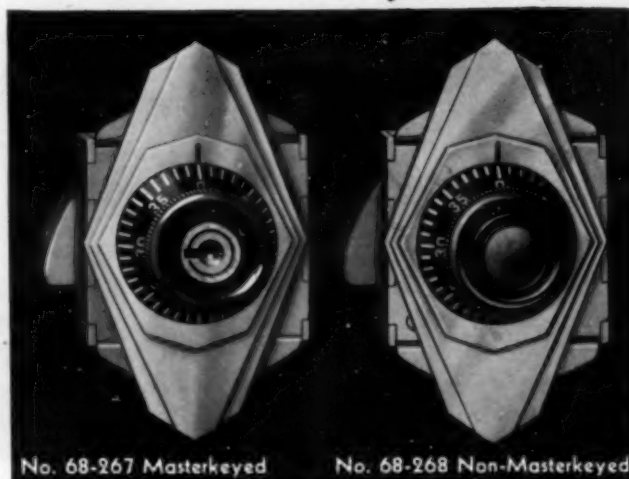
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● Thousands and thousands of "noise traps" in classrooms, corridors, noise centers!—that's the secret of Fibretone Ceilings. The noise traps are scientifically designed cylindrical holes drilled in the Fibretone sound-absorbing panels. In a classroom 23' x 35', for instance, you'd have 389,620 of these ingenious "noise traps," constantly functioning to trap and dissipate irritating, unnecessary noise—noise that reduces personal efficiency of students and teachers. Send for the new Fibretone brochure. Johns-Manville, Box 290, New York 16, N.Y.

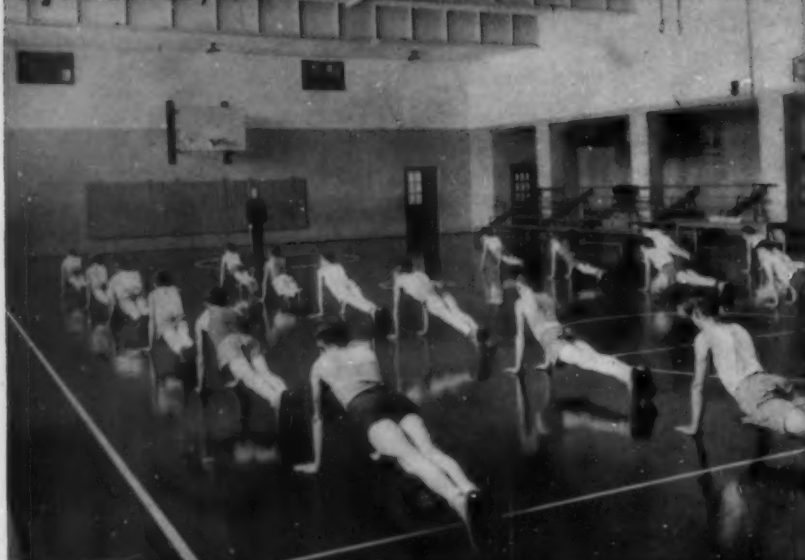
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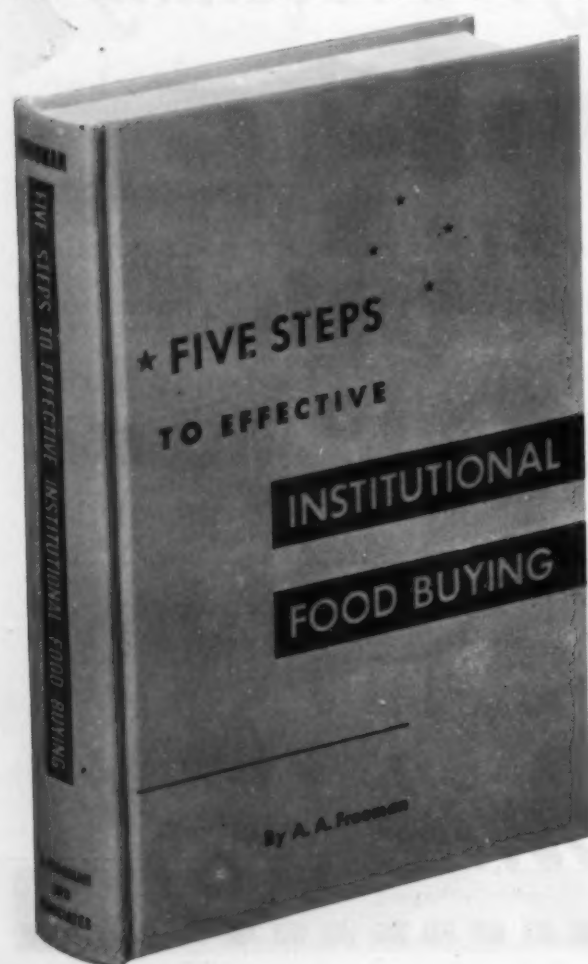
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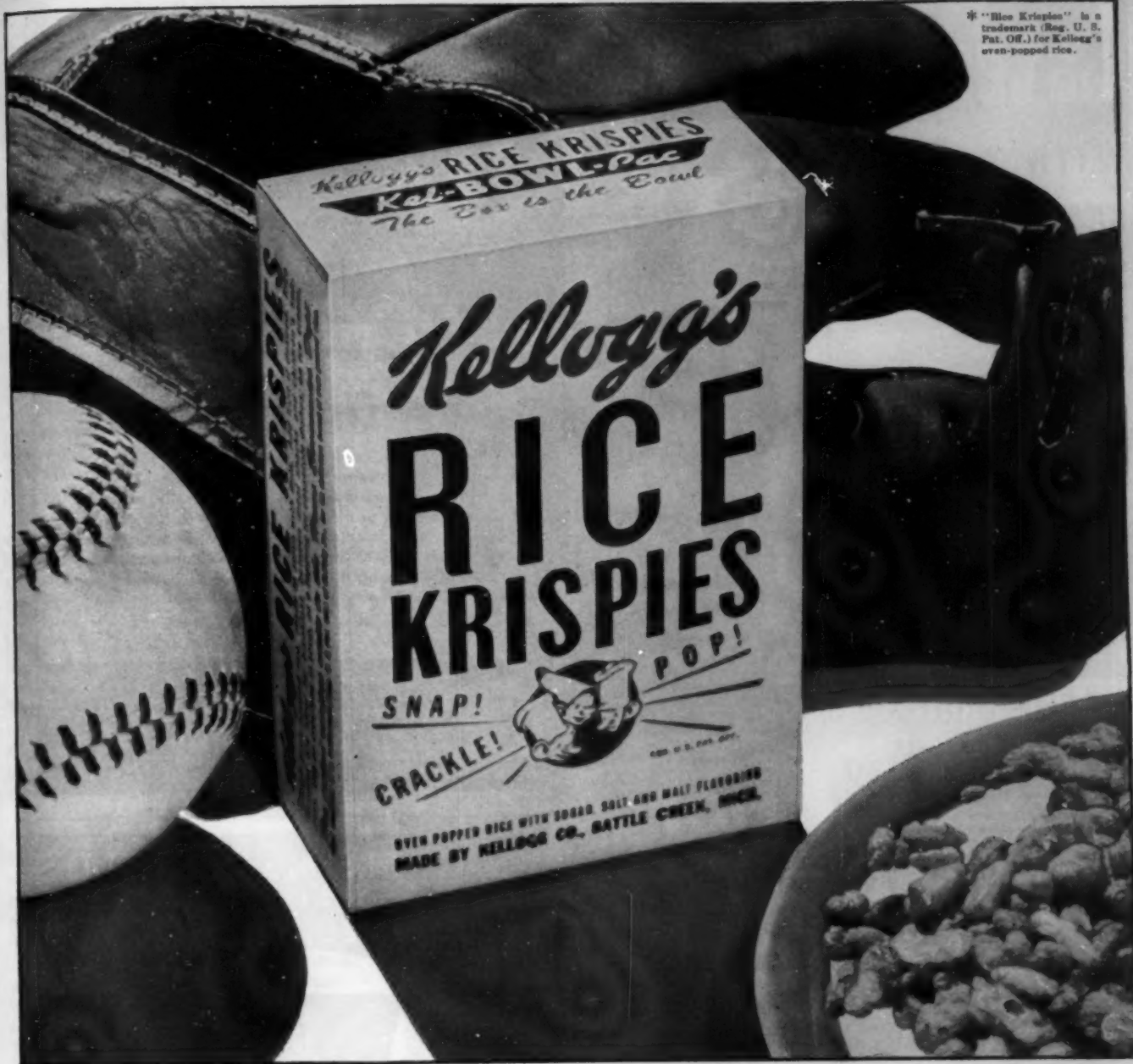
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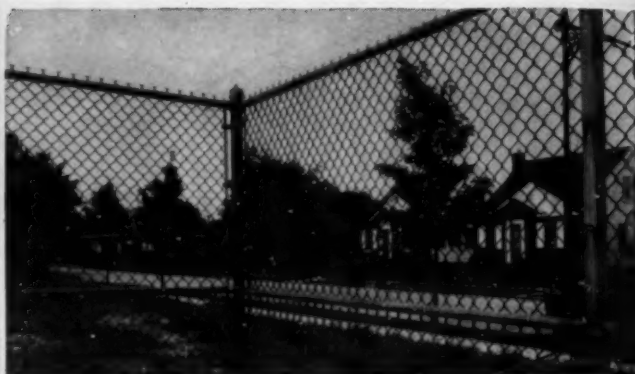
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INITIALY, you may pay more for a Goodform Aluminum Chair. But when you measure cost in terms of service life, freedom from maintenance and repairs and ease of cleaning, Goodform is the most inexpensive chair you can buy.

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WEIGH IT OUT!
Toledo SPEED-WEIGH over-and-under scales provide speedy, accurate weighing of portions.

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Modern Toledo Scales and Food Machines help you *control costs* in your kitchen... *serve tastier, more appetizing meats*... and *save time* in handling and preparing foods!

Start right when food is received... *weigh it in!* To avoid costly oversize servings of steaks, roasts, salads, croquettes, patties and similar foods... *weigh out portions* with a Toledo SPEEDWEIGH Scale! To control quality... *weigh ingredients* going into mixes.

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are a nation-wide organization of floor treatment experts.
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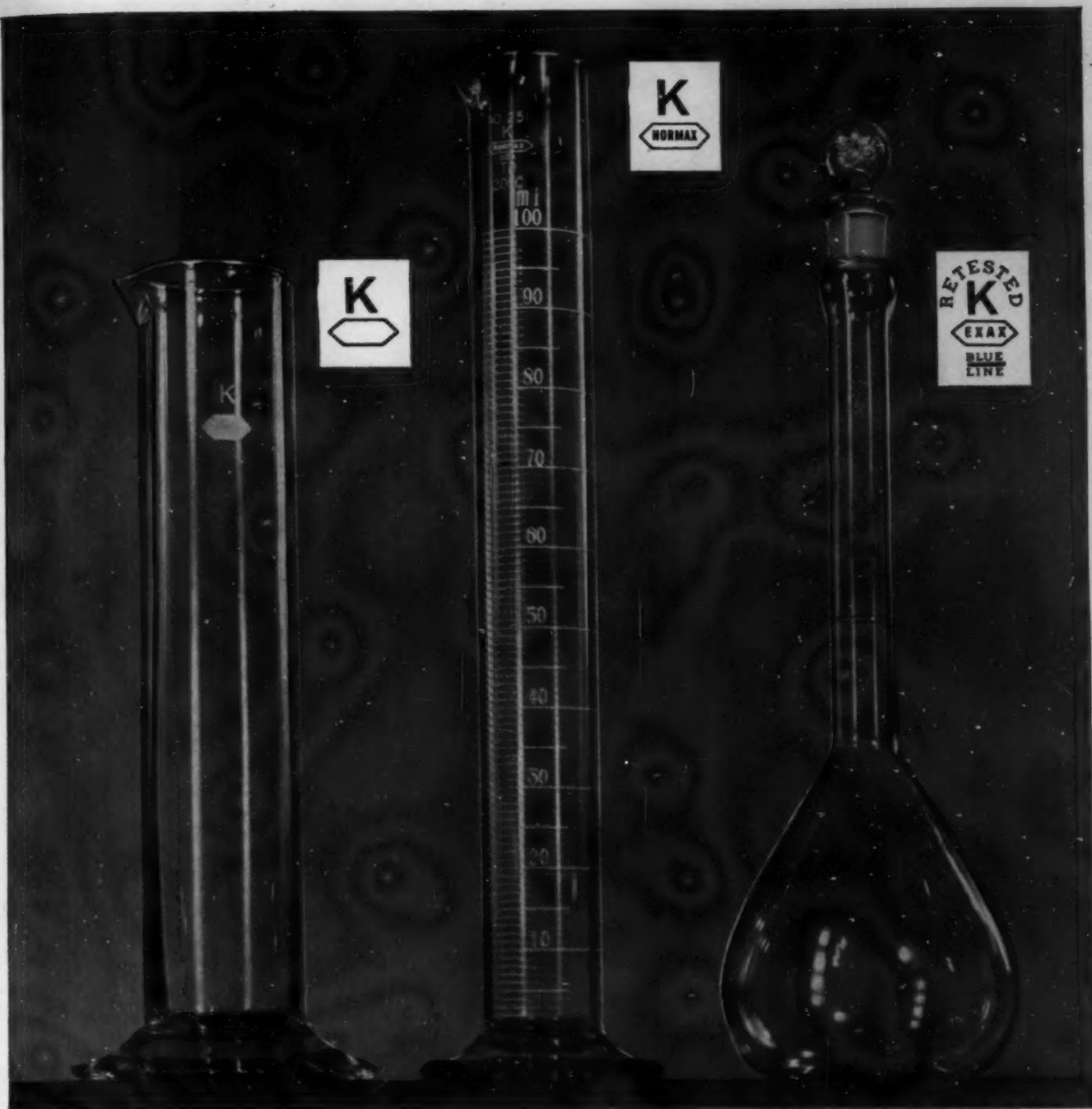
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2E-142 — I.E.S. Study Lamp with an 8 in. x 18 in. parchment shade and bronze finish base. Height overall 27 in. Takes 100 watt bulb. Wired with 9 ft. of approved cord, turn button socket and unbreakable rubber plug. A real value at this price.

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Kimble "NORMAX" Precision Graduated Cylinder No. 20026, 100 ml;
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This big, smooth cutting Toro Professional cuts 2 acres per hour. Operates beautifully among trees, shrubs and walks. Can be equipped with a snow plow. Dependable 4 h.p. engine. Forward and reverse transmission. Riding sulky. "Out-in-front" reel for extra smooth cut. Rugged steel construction. Also available in 30" width... convertible to 76" width by adding wing units.



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The Toro Starlawn comes in 24", 27" and 30" cutting widths... with two exclusive features! Floating axle holds reel parallel to turf when wheel rides over walk or into depression. High-low cut angle adjustment keeps bed knife in proper position at all times. Heavy-duty engine. Independent reel and traction controls for easy transport. All-steel construction. Sulky for 30" size.



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For your students, as for first-graders, Von Duprin exit devices assure safe, quick, easy exit — at every season of the year, at every minute of the day and night.

Von Duprins are strong, dependable, smooth in operation. They take the wear and tear of daily use, and still have abundant reserve strength for the tremendous strains of emergency demands. They do all this for scores of years at a maintenance cost that is practically nil.

VON DUPRIN DIVISION
VONNEGUT HARDWARE CO., INDIANAPOLIS 9, INDIANA

Von Duprin



The floor of this institution's lounge, a "prestige" item, cost \$3328 a year to keep up... more than the cost of the floor itself! A Legge Safety Engineer shows them...

How to cut \$3016 a year from the price of prestige

Mr. Higby: Look at these figures! A whole night's work for 8 men every week. And the floors look rotten. How come?

Legge Safety Engineer: You're using a wax and it doesn't last. Your crew has to wash it off each time... then put on a new coat. They go through the same rigamarole every week. It takes a lot of time.

Mr. Higby: What can be done?

Legge Safety Engineer: Use a Legge Non-Slip floor polish. It stands up under heavy traffic. I'll show your crews how to make it last by cleaning and buffing... sometimes mopping on more polish. But they won't have to strip it off. That's the work that takes time.

(A MONTH LATER) Mr. Higby: This is better! Now 3 men do the floor in 2 hours. I'm saving \$58 a week. And the floors look swell.

Legge Safety Engineer: They'll stay that way if your men follow my instructions. I'll stop by often to make sure they do.



Get this man's help on your problems

He's the Legge Safety Engineer who has helped Mr. Higby in your area get well-kept floors at lower cost... reduce slippery-floor accidents up to 95%. He engineers an upkeep program to your floors; instructs your maintenance crews in efficient Legge System methods. His advice is free; his supervision is part of your purchase of Legge Non-Slip floor-care products.

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Please send me a free, no-obligation copy of Mr. Higby Learned About Floor Safety the Hard Way.

Signed _____

Title _____

Type of Room _____

Area _____ sq. ft.

C-43



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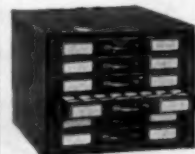
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ALL STEEL
FIREPROOF
INDEXED
PRACTICAL
EFFICIENT



File Drawer for individual slide holders
... Model SF-5

File drawer for "Blocked" unit slides
... Model SF-5-S



FILMSTRIP CABINET

MF-6 Similar to Slide Files... has 6 drawers, adjustable dividers. Holds over 300 regular 1 1/2" 35 mm filmstrip cans... overall size 15" wide; 12" deep; 13" high.

FOR ALL 2"x2" SLIDES Files; readymounts, glass, etc., heavy gauge welded construction throughout... 5 drawers, instant selection. Overall size 15" wide; 12" deep; 13" high. Olive-Grey enamel baked on. Polished chrome trim.

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Model SF 5S holds approximately 2500 slides (5000 readymounts)

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One-Case ★
FILMOSOUND

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PROJECTOR	MACHINE REPAIRED	FILM BROKE	FILM REPLACED	PICTURE STEADINESS	FILM* PROTECTION
BELL & HOWELL	No	No	Once (at 80 hrs.)	Steady	Excellent
PROJECTOR "A"	Twice (Major)	9 times	4 times	Very Unsteady	Fair**
PROJECTOR "B"	Once (Minor)	16 times	6 times	Steady	Poor
PROJECTOR "C"	Once (Minor)	2 times	Once (at 64 hrs.)	Slightly Unsteady	Fairly Good**
PROJECTOR "D"	Twice (Major)	15 times	7 times	Very Unsteady	Poor**
PROJECTOR "E"	Twice (Major)	6 times	3 times	Unsteady	Fairly Good**
PROJECTOR "F"	Four Times (Major)	27 times	13 times	Very Unsteady	Poor

* Ratings indicate condition of film relative to scratches and wear.
** Indicates machine also deposits oil on film.

NEW ACADEMY FILMOSOUND



Lightweight, portable. Provides 80-minute show . . . stops for individual still pictures. Reverses instantly. Brilliant 1000-watt lamp. Double the sound output of other lightweight sound projectors. Approved by Underwriters' Laboratories. With 8", separate speaker, only \$495.

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Dimmer Switch-board, 16-4000 watt transformer type dimmers with cross connecting panel and 4 section control masters. For full details, write: CARL Q. LEE, Administration Building, Zion, Ill.

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There's still time to get Spring or
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From the table below select the plan
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Address _____

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Here it is... the Medart Football Scorer and Timer... factory tested for hundreds of hours (including outdoor weather tests)... and field tested during the season just past. This means that mechanically and in design the Medart Football Scorer and Timer is "right" from the standpoint of operation and daylight visibility... features that insure accuracy and durability. The Medart Scoreboard is EXTRA large... 20' long and 16½' high. All numeral blocks are 2' high by 13½" wide. Records time in minutes and seconds with time left to play diminishing automatically each second. All steel construction with numeral blocks weather-proofed. Reset mechanism permits setting time from 15 minutes down to any length time desired. The Medart Scorer and Timer is such an improvement over existing ones that seeing it before you make your scoreboard investment is a "MUST"!

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"Air-Lift"
ROTARY MOWER**

- Cuts grass of any height
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The Pearce "Air Lift" is one of the original rotary type mowers... service proved over a period of 12 years. It has all of the desirable features you expect in this type of mower and is of exceptionally rugged construction to withstand continuous, heavy-duty service. Both mowing ability and serviceability are second to none. Available in 25-inch and 31-inch cutting widths as well as 18-inch cut for trimming in confined areas.



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outlast ordinary washers 6 to 1

Thousands of plants, hospitals, schools and colleges, housing projects, hotels, utilities and other establishments have found the answer to high plumbing maintenance costs in modern 'SEXAUER' methods, advertised in THE SATURDAY EVENING POST and standard with top-flight maintenance engineers everywhere.

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AND, UNDER FRIGIDAIRE SCHOOL PLAN,
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To accredited schools, Frigidaire offers an economical plan for equipping Home Economics Departments with latest-make appliances, and keeping such equipment up-to-date.

These schools may purchase through local Frigidaire dealers at special "school prices" (approximately $\frac{1}{2}$ regular retail price) any of the following:

Frigidaire Refrigerators, all nine models of America's No. 1 Refrigerator.

Frigidaire Electric Ranges, in any of eight different eye-appealing models.

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Following purchase, school is entitled to a unique "replacement"

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Frigidaire

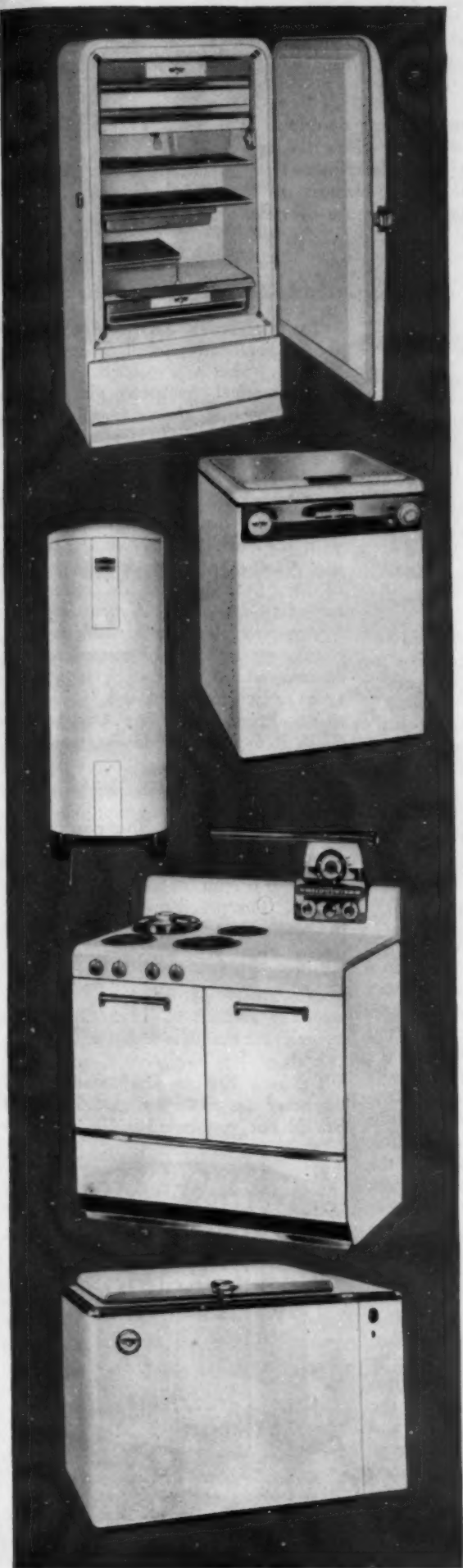
Home Appliances

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ALL TYPES OF REFRIGERATION AND AIR CONDITIONING EQUIPMENT



Frigidaire manufactures an outstanding line of refrigeration equipment—Reach-In Refrigerators for cafeterias and laboratories, Ice Cream Cabinets, Beverage Coolers, Water Coolers, Compressors, Cooling Units and Controls. Also all types of Air Conditioning equipment for assembly halls, classrooms, laboratories or offices. (These types of equipment are not available under "School Plan.") See your Frigidaire Commercial Dealer.



WHAT'S NEW

MARCH, 1949

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 40. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Wide Field Microscope



The new BK-2 microscope, designed for use in teaching, is one of a new line developed by Bausch & Lomb. This junior stereoscopic wide field microscope may be used for examination of specimens with either reflected or transmitted light and has a dustproof, geared prism housing. The extra wide rack and double dovetail extension slide are features of the new line. Other features include a glass stage with front metal protection plate; latest design V-U base detachable by the turn of a knob; concave mirror and diffusing disc, adjustable in three planes, and 2 sets paired objectives in revolving, dustproof double nosepiece.

The new series of wide field microscopes consists of 15 basic models that can be interchanged into 58 different combinations. All eyepieces and objectives are of new design and the microscopes are equipped with diffusing discs of black and white that provide background contrast. All models are finished in a neutral gray enamel that is attractive and easy to keep clean. Bausch & Lomb Optical Co., Dept. CUB, 635 St. Paul St., Rochester 2, N. Y. (Key No. 822)

Refuse Collection Unit

The new Load-Packer is a completely enclosed, sanitary refuse collection and disposal unit that prevents garbage and other refuse from spilling while being transported. Colleges with a number of buildings and dormitories will find it a

convenient, sanitary method of collecting refuse and garbage for disposal.

The Load-Packer is mounted on a truck and is available with 9, 12 and 15 cubic yard capacity for mounting on 16,500 through 20,500 minimum chassis G.V.W. The large, wide loading hopper permits emptying of the largest containers without spilling and the power-operated tailgate draws the refuse into the enclosed body from which no refuse or odor can escape. Two hydraulic cylinders within the top of the body and twin cylinder under-body hoists raise the body to the proper angle for quick, complete dumping.

The Load-Packer is easily loaded and unloaded, requiring no skilled labor for its operation. The refuse is compressed by hydraulic pressure within the body of the unit, thus permitting larger loads and fewer trips to the place of disposal. This complete unit should help solve the refuse collection and disposal problem for many institutions. Gar Wood Industries, Inc., Dept. CUB, Wayne, Mich. (Key No. 823)

Electric Time System

The new electric time system developed by IBM regulates all clocks in a time system without special supervisory or clock wiring. The master clock is plugged into an ordinary light socket and electronically checks all clocks in the system individually and automatically once an hour for uniformity with the master clock. Through electronic tube action in a transmitter, the control clock sends a supervisory impulse out over the regular electric current lines and if any clock in the system is slower or faster than the master time control, it corrects itself once each hour automatically.

Automatic signaling through the program unit of the master control is also possible without special signal wiring. Connected to the regular alternating current, the signals sound automatically through their electronic receivers when an impulse is released to them. With the new system, coordinated time control and uniform time throughout a building or group of buildings can be maintained without special clock wiring. International Business Machines Corp., Dept. CUB, 590 Madison Ave., New York 22, N.Y. (Key No. 824)

Portable Microgroove Recorders

Presto recorders have been redesigned for microgroove as well as regular recording. The new models, known as K-10 and Y-3, feature a pick-up with variable weight and changeable needle and have provision for feeds of 112 and 224 lines per inch, both inside-out and outside-in.

Both longer playing time and less filing space for recordings are possible with the new recorders since 6¾ minutes of recording occupies only one inch of disc. Disc costs are also reduced by use of this machine. A new improved microgroove playback turntable for high fidelity reproduction of microgroove recordings is also available in either single speed or two speed (78 and 33⅓ r.p.m.) models. Presto Recording Corp., Dept. CUB, P. O. Box 500, Hackensack, N. J. (Key No. 825)

Enduro Pencil Sharpeners

The new Dixon No. 20 Enduro pencil sharpener is built for long wear and good service. The pencil opening expands to fit any size pencil and a lever adjusts for fine or blunt points. A Point-Stop prevents pencil waste. The extra large, scientifically ground cutters make sharpening easy, fast and clean. Extra capacity receptacles are available in green, burgundy or amber.

The new Enduro Draftsman No. 27 sharpener has all of the qualities of the No. 20 but was especially designed for



drawing pencils. Joseph Dixon Crucible Co., Dept. CUB, Jersey City 3, N. J. (Key No. 826)

Liquid Soap Dispenser



The new Bobrick liquid soap dispenser was developed by a leading industrial designer to combine attractiveness and functional simplicity. Known as the Bobrick 24, the streamlined hood and all working parts are of stainless steel. The mechanism is completely demountable and replaceable without the use of any special tools. The shatterproof soap container is made of Lustrex which is impervious to all soaps and, being translucent, the level of the soap is readily visible. The mechanism, known as Bobrick HydroFlex, is designed to give trouble-free service indefinitely.

The result of more than two years of research and testing, the new dispenser is attractive, practical and requires a minimum of maintenance. The concealed wall fastening guards against theft and the newly designed, locked filler-cap is chained to the dispenser. The cap can only be opened by a special key. The Bobrick WallPlad permits attaching the new dispenser to marble, tile, steel, concrete or any hard surface wall without screws in less than 3 minutes, or it may be attached by conventional methods. **Bobrick Mfg. Corp., Dept. CUB, 1839 Blake Ave., Los Angeles 26, Calif. (Key No. 827)**

Stencil Sheets

Two new stencil sheets have recently been announced by A. B. Dick Company. The new addressing stencil sheet is designed for use with mailing list addresses which, through its use, can now be mimeographed on gummed, perforated label sheets. Guide lines which correspond to perforations on special gummed paper are shown on the special stencil sheet, thus providing a simple, inexpensive addressing method.

The new handwriting stencil sheet is designed especially for use by teachers in the production of lesson sheets, tests and other classroom needs. These can be written by hand by the teacher at her convenience and as many copies as may be needed produced on the mimeograph. Free hand illustrations and lettering can

also be drawn on these new stencil sheets which can be filed for re-run if required. **A. B. Dick Company, Dept. CUB, 720 W. Jackson Blvd., Chicago 6. (Key No. 828)**

Moduline Laboratory Furniture

The new line of laboratory furniture introduced by A. S. Aloe Company is the result of three years of research and planning with demonstration and test installations in selected laboratories. The resulting streamlined, all metal line of sectional laboratory furniture is known as Moduline.

Each of the 35 carefully designed units is built in standard architectural widths of 24, 35 and 47 inches and permits versatility in arranging cabinets, sinks and other items for routine or highly specialized work in an available area. Individual units are easily bolted together and may be readily rearranged at minimum expense should requirements change. The Moduline cabinets are designed with concealed hinges and pre-punched splash-



backs for convenience in mounting utilities without loss of table working space. Other features include stainless steel tops and sturdy understructures with special baked-on finish to provide an acid, alkali and solvent resistant surface. **A. S. Aloe Company, Dept. CUB, 1831 Olive St., St. Louis 3, Mo. (Key No. 829)**

Ampro Film Splicer

A precision film splicer for handling 8 mm. and 16 mm. sound and silent films has been developed by Ampro. Single shearing action, rapid repeated splicing operations, narrow pressure welded splice and splicing of sound with heads up for amateur editing or tails up for inspection or repair service are some of the features of the new unit. It is finished in bronze crinkle-baked enamel. **Ampro Corp., Dept. CUB, 2835 N. Western Ave., Chicago 18. (Key No. 830)**

Frigidaire "Meter-Miser"

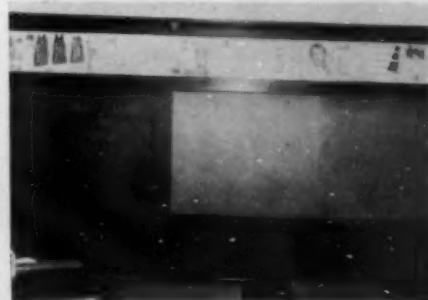
A model of the "Meter-Miser" for commercial and institutional refrigeration has been developed by Frigidaire. This new lightweight, rotary refrigeration mechanism is contained in a small compact package weighing little more than 85 pounds. The improved design and engineering have simplified the mechanism so that the compressor has only two simple parts that move. The refrigerant condenser is mounted on a liquid refrigerant receiver and a small horizontal electric fan cools the unit. The mechanism is sealed and self-oiling.

Three models of the new unit are available to provide for varying capacities. The new unit is adaptable to a wide variety of installations requiring remote type refrigerating mechanism. It can be installed in corners, under counters or can be suspended from the ceiling. **Frigidaire Div., General Motors Corp., Dept. CUB, Dayton 1, Ohio. (Key No. 831)**

Blackboard Reconditioner

A new method has been developed to recondition old blackboards that have a polished surface and on which chalk no longer marks clearly because of years of use. The new Pangborn equipment is designed to sandblast the boards quickly, efficiently and without dirt or muss. Consisting of three parts—a blast cleaning machine, a dust collector and an air compressor—the equipment is easily portable and is quickly set up.

A four foot section of blackboard can be blast-cleaned at each setting of the machine which fits tightly against the blackboard with special rubber seals to prevent escape of the air-driven abrasive and the resultant dust. The dust is collected by vacuum in a bag which is easily emptied at convenient intervals, thus no dirt escapes into the school room and the operator works in a clean atmosphere. Air pressure for operation of the equipment is furnished by a compressor stationed outside the building, powered by a portable gasoline or electric motor. The equipment is easy and economical to



operate. **Pangborn Corporation, Dept. CUB, Hagerstown, Md. (Key No. 832)**

Ice Cube Maker



The new Ice-Flo is a completely automatic ice cube making machine which is available in various sizes to fit the needs of a single department, where several units might be used, or of a complete institution.

The machine produces crystal clear ice cubes at the point of use, 1320 to 12,500 per day in single or multiple installations. Ice-Flo cubes are frozen in molds which form the bottom of a water tank. When frozen solid, they are automatically defrosted and float to the top of the water in the tank where they are carried over a dam and deposited in a dry storage bunker. The cubes do not mat together and are of two dimensions, thus being suitable for most uses.

Finished in stainless steel, the units are table height. They are simple to operate and are designed for sanitary, economical operation. **Ice-Flo Corp., Dept. CUB, Lonsdale, R.I. (Key No. 833)**

Aluminum Slide Binder

The new GoldE "Snap-it" aluminum 2 by 2 inch slide binder is designed to permit easier, faster mounting of 35 mm. color or black and white film. The film is placed between the two pieces of glass in the binder and the binder snaps them together. The film is self-centering and is held firm and flat.

The aluminum binder has round corners, is shockproof and dustproof and provides protection for color transparencies. It can be reused since the film is readily snapped out and another put in. The binder is light in weight, easy to store or carry in quantity and has an identification panel for projection guide. **GoldE Mfg. Co., Dept. CUB, 1222 W. Madison St., Chicago 7. (Key No. 834)**

Plastic Tableware

Russel Wright, industrial designer, has styled a new set of plastic dinnerware developed especially for institutional use. The set is attractive in appearance and highly functional in design to permit easy stacking and handling. Known as Meladur, the set is made of Melmac, a plastic material especially well adapted

for use in dinnerware since it has the appearance of china, is virtually unbreakable and is quiet in use. It is tasteless, odorless and nontoxic and is impervious to grease and unaffected by food, soaps or detergents.

The set consists of cup, saucer, dinner plate, combination salad and bread and butter plate, soup bowl, cereal bowl and fruit bowl and is available in tan, blue or white. **Plastics Div., General American Transportation Co., Dept. CUB, 135 S. La Salle, Chicago 3. (Key No. 835)**

Bedroom-Living Room Unit

The new bedroom-living room combination unit furniture announced by Hill-Rom is especially suitable for dormitories and personnel quarters. It is designed to make dormitory rooms attractive for living as well as sleeping. The combination unit consists of a comfort-



able bed with innerspring mattress and a bolster so that it will serve as a lounge during the day; a three-in-one combination unit consisting of a chest of drawers, vanity table and desk with built-in book shelves, and a convenient wall shelf for books, radio, clock and other necessities or knickknacks. A fluorescent lighting fixture under the front edge of the shelf is available as optional equipment.

The chest-vanity-desk unit is finished on all four sides so that it can be placed in any desired position in the room, thus making many arrangements possible. It has a stainless steel base to prevent damage to the wood and a handy storage compartment with a hinged top and inside removable tray in the right side of the desk. **Hill-Rom Company, Dept. CUB, Batesville, Ind. (Key No. 836)**

Lighter for Bunsen Burners

The Irving Litter is designed to be attached firmly and permanently to the tube of any Bunsen Burners from 3/8 to 1/2 inch o.d. Only one hand is required to light the burner with the Irving Litter thus leaving the other free. The Litter eliminates the need for matches and is ready for instant use at all times. **W. M. Welch Scientific Co., Dept. CUB, 1515 Sedgwick, Chicago 10. (Key No. 837)**

Aluminum Door Closer

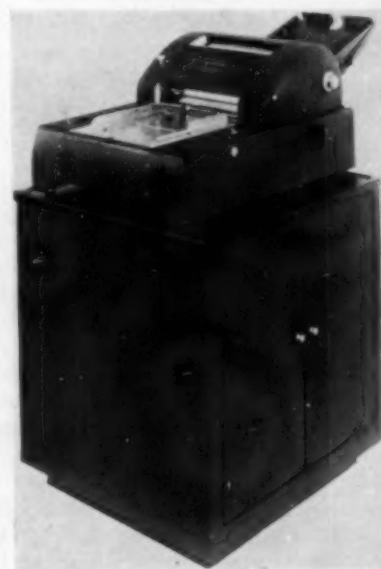
The new "broad-shouldered" Norton door closer has a permanent mold aluminum case. The resulting light weight makes possible speedy and economical installation. The new closer has had exhaustive field and factory tests equivalent to 20 years of continuous use without interruption.

The new aluminum closers are of the rack and pinion hydraulic type, which gives positive door control at every point in the movement of the door, and have all steel interior parts. The closers have a leakproof shaft, new oil-lite bottom bearings, 50 per cent greater bearing surface, two speeds of regulation on one screw and holder arms that permit the door to be held at any desired opening. Made in all standard sizes with 6 types of holder arms and 7 bracket styles, the new Norton closers are finished in gold, aluminum and bronze or in standard brown, black or prime coat. **Norton Door Closer Co., Dept. CUB, 2900 N. Western Ave., Chicago 18. (Key No. 838)**

Vivid Liquid Duplicator

The new addition to the Vivid Duplicator line is an electrically driven, liquid duplicating machine which eliminates wicks and jets and moistens the paper by a train of rollers similar to the ink distributing mechanism on a printing press. The fluid capacity is large and when the machine is shut off, all fluid in the distributing trough returns automatically to the reservoir.

The machine is simple to operate and handles work ranging from 3 by 5 inch cards to 9 by 17 1/2 inch sheets at a speed of 75 copies per minute. Master sheets can be used repeatedly until the ink is



exhausted. **L. C. Smith & Corona Typewriters, Inc., Dept. CUB, Syracuse 1, N. Y. (Key No. 839)**

Stainless Steel Refrigerator-Freezers

A new line of stainless steel freezers and a new, improved stainless steel walk-in freezer-cooler have recently been introduced. Two of the new freezers are of the vertical type with front opening door for easy food accessibility and providing maximum food storage capacity on minimum floor space. Model 25S has a 25 cubic foot freezing and food storage capacity with a self-contained, hermetically sealed type condensing unit. Model 30RS has a 30 cubic foot capacity with remote, open type, heavy duty condensing unit for flexibility in application and installation.

The new model 200S stainless steel walk-in freezer-cooler has a total of 135 cubic feet of storage capacity. A reach-in freezer section has storage capacity for 900 pounds of frozen foods. The walk-in section has 110 cubic feet for food storage. All models are stainless steel inside and out, welded and sealed to prevent moisture infiltration, with chromium plated door hardware. Amana Society, Dept. CUB, Amana, Iowa. (Key No. 840)

Stainless Steel Food Container

The new Solar stainless steel food container has been designed for convenient, sanitary storage of food in store rooms, refrigerators and other locations and for transportation from a central kitchen or between buildings. The seamless construction leaves no crevices or edges where food can lodge, body and bottom are one unit, and the cover has a stainless steel spring that, when pushed down into place, grips the inside of the neck firmly and protects the contents of the container from air contamination.

The stainless steel handles are designed



for ease in carrying and in pouring and the wide mouth permits easy removal of stored food by pouring or ladling. A 1½ inch bottom band of heavy gauge stain-

less steel reinforces the container and raises it ½ inch off the floor. Solar-Sturgis Mfg. Co., Dept. CUB, Melrose Park, Ill. (Key No. 841)

Even-Ray Heating

The Even-Ray Coil Mat has been developed to provide effective circulation for radiant heating systems. Coils in mat form are installed with a minimum of time and effort and provide even distribution of heat. Mats are machine formed to exact measurements to suit the needs and the coils are held in position by spreaders for shipment. The spreaders or spacers act as connectors for ceiling installations and a special spreader is furnished for floor installation which holds the coils at the proper elevation while concrete is being poured.

The coils are designed to give an even output of infra-red rays. This is accomplished by the method of winding which



alternates the supply position with the return for a balanced output. Made of Type L, hard tempered copper tubing, the Even-Ray coil is rigid and easy to handle when installing. The Even-Ray Co., Inc., Dept. CUB, 879 Broadway, Newark 4, N.J. (Key No. 842)

Steam Tables

Twelve models of standard steam tables for gas or electric heat are available in the new line developed by Blickman. These improved steam tables are constructed for long service life and maximum sanitation. They are available with open and closed bases with rigid welded understructure to give strength and stability.

All tables in the line have stainless steel top and covers, inset covers with beaded ladle cutout, seamless, crevice-free surfaces, reinforced top openings, hardwood carving board, strong stainless steel top construction with underneath bracing, heavy copper water pan, Duco finish on bases and flanged feet on all open base tables. Electric heating units are the built-in, heavy duty immersion type with switch box on the front apron of the table at the right. S. Blickman, Inc., Dept. CUB, Weehawken, N.J. (Key No. 843)

Budgetary Accounting Machine



The new Burroughs Budgetary Accounting Machine is designed for faster, simpler operation in budgetary accounting and reporting. The machine is set up to produce all records necessary for budgetary control and to produce them simply and at high speed. Automatic features include totals-to-date and balances; proof totals; line-lock proof of balances; printing of dates and ciphers, and fully automatic carriage.

The simple keyboard has few motor bars and has distinctive symbol keys for controlling and identifying each kind of transaction. The keyboard slope, generous key spacing and light key action help the operator to handle figures rapidly and the automatic action simplifies operation. Burroughs Adding Machine Co., Dept. CUB, Detroit 32, Mich. (Key No. 844)

Power Meat Cutter

The new Biro power meat cutter is built of stainless steel for ease of cleaning, attractive appearance and sanitation. The smooth, hard finish does not corrode or rust and leaves no place for refuse to accumulate. The new machine is the same size as the regular Biro Model 22 which has cutting clearance 12½ inches high and 11 inches wide and has a total table area of 28 by 28¾ inches with an overall height of 61 5/16 inches. It is especially designed for institutional use. Biro Mfg. Co., Dept. CUB, Marblehead, Ohio. (Key No. 845)

Insect-Killing Paint

Smartbrite is the name of a quality oil base paint incorporating DDT to make it effective in eliminating flies, spiders and other insects from areas covered with the product. Preliminary research showed surfaces painted with Smartbrite remaining insect free after 24 months. The same surfaces are harmless to humans or animals. Smartbrite covers up to 450 square feet to the gallon and has excellent wearing qualities. It is available in white and six colors. Yates & Smart Paint Co., Dept. CUB, 450 Fifth St., San Francisco 18, Calif. (Key No. 846)

One-Piece China Cup

A new mechanized process has been developed to produce a one-piece cup without joints, cup and handle forming an integral unit. Cost is reduced by the new automatic cup-making process which results in accelerated production and low breakage during manufacture. Strength of cup and handle is equalized by this process which is the result of an intensive research program.

The new cup is available in the Ovide shape and is made with the All-American vitrified china body used in all Buffalo China products. It is supplied with or without standard decorations in Buffalo China white, Cafe and Lune colors. **Buffalo Pottery Co., Dept. CUB, Buffalo 10, N.Y. (Key No. 847)**

Fire-Resistant Finish

Fyr-Kote is a fire-resistant finish which has all the qualities of fine paint with fire-retardant chemicals added. The product resists fire by a chemical reaction which releases carbon dioxide to smother flame, a tough fusion film which forms to reduce heat and oxygen reaching the wood fibers and the use of a non-inflammable resin base.

Fyr-Kote is available in Interior Flat Finish, which is washable and comes in white and five pastel tones, Brilliant Base Coat, which is a white interior undercoat, and Brilliant Finish, which is a lustrous white enamel. **The Fyr-Kote Co., Dept. CUB, 1823 Washington Ave., St. Louis 3, Mo. (Key No. 848)**

Plastic Disc SoundEraser

Plastic discs for dictation and recording can now be re-used 25 times or more. A compact machine about the size of a portable radio, known as the SoundEraser, automatically erases all sound from used discs. The SoundEraser is electrically powered from any conventional outlet. The operator places a recorded disc on a spindle, presses a button and in less than a minute the lid of the machine opens automatically and exposes the completely erased disc ready for immediate re-use. **The SoundScriber Corp., Dept. CUB, New Haven 4, Conn. (Key No. 849)**

Dish Drying Machine

The new Colt C-300 dish drying machine has been designed primarily for use with the Colt Autosan C-22 or C-3 dishwashing machines. The dishes are carried through the drier on an inclined belt, to which they are transferred from the washer, and are dried by the application from above and below the dishes of compressed air. The bulk of the water

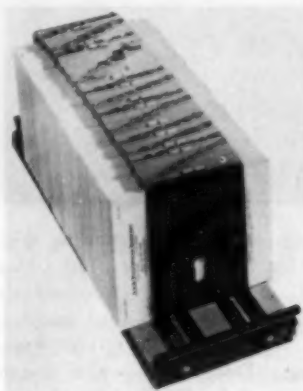
is thus removed, and remaining moisture film evaporates as a result of residual heat of the dish and moving air within the drier.

The new unit is constructed of stainless steel, with dishes carried on an inclined belt and there is a door in both front and back of the enclosure for easy cleaning. **Colt's Mfg. Co., Dept. CUB, Hartford 15, Conn. (Key No. 850)**

Paper Sorters

The new Sort-O-Mat Direct Vision paper sorters developed sometime ago by Yawman and Erbe are now available in steel in a new model in which many changes have been made, resulting in improved operation.

The Sort-O-Mat is a vertical sorter and since papers stand on edge, space is saved. Alphabetic sorting is done at one time with this new model to the first two letters of each name and a second time through sorts to the fourth letter. Subjective, numeric, geographic or special combination sorting is also provided.



Automatic expansion provides a wide filing V between guides and light compression keeps papers flat. A round hole in the sorter provides a sight check throughout for any missed papers during the stripping operation. **Yawman and Erbe Mfg. Co., Dept. CUB, Rochester 3, N.Y. (Key No. 851)**

Small Automatic Washer

The new Junior Automatic Washer developed by Prosperity is now available with the Prosperity Formatrol which automatically completes the sequence of operations and stops the machine when the washing cycle is finished. The control gives greater production, greater economy and quality control of every load. The large drop in the Junior Automatic Washer cylinder provides the necessary mechanical action to clean even dirtiest clothes thoroughly, and the machine is designed for proper rinsing action. **The Prosperity Co., Inc., Dept. CUB, Syracuse 1, N.Y. (Key No. 852)**

Automatic Coffee Brewing

Push button automatic controls are now available on Cory coffee brewing equipment to assure consistent coffee quality. Known as the Cory Push-Button Automatic Coffee Brewing System, Model C500-A, the unit controls the measuring of the coffee for uniformity of strength; measurement of the water; temperature of the water to ensure proper brewing, and infusion time to prevent over-brewing of the coffee. The new unit ensures uniform results when the same quality of coffee is used and reduces personnel time for supervision. **Cory Corp., Dept. CUB, 221 N. La Salle St., Chicago 1. (Key No. 853)**

Life-Size Television

Equipment designed specifically for presentation of television programs to large audiences has been announced by RCA Victor. The pictures produced by the new projector can be fitted to suit screen sizes ranging from 3 by 4 feet to approximately 7 by 9 feet. The reflective optical system gives the pictures added brilliance and clarity.

The new projector permits instant selection of a desired station and is simple to operate. Controls are arranged for adjustment without interference with the projected picture and a simple focusing system permits adjustment for the longer or shorter projection throw, depending upon the size of the screen. The RCA all-electronic tuning system ensures well-framed, steady pictures and the sound system is a specially designed unit for operation adjacent to the projection screen. **Radio Corporation of America, RCA Victor Division, Dept. CUB, Camden, N.J. (Key No. 854)**

Eye-Q Lighting Fixture

The new Eye-Q is a fluorescent lighting fixture with two 40 watt lamps. It is a sturdy, all steel unit with high lighting efficiency and an overall light distribution that assures successful down-lighting as well as widely distributed overhead illumination. The unit is designed for economical initial cost, installation and maintenance.

Opening from either side, the louvers can be completely removed without fastening devices. The new Smithcraft Lo-Brite shade finish is used on the new unit and the louvers provide cutoff from lamp glare. The ballast is mounted on sliding brackets so that hanger stems can be positioned at any point along the 4 foot channel. The side reflectors swivel upward to permit cleaning of the inner surface without removing lamps. **Smithcraft Lighting Division, Dept. CUB, Chelsea 50, Mass. (Key No. 855)**

Tennis Teaching System

A complete system for teaching tennis has been announced by Tom Stow and consists of a stroke developer, mat showing proper footwork and a text book. Developed after years of experience, the system is designed primarily for teachers, particularly those instructing class groups. The Stroke Developer allows the pupil to practice any stroke until he has mastered it since it holds the ball stationary at any desired height. The explanations and pictures in the textbook, the footwork mats and the Stroke Developer itself simplify both the system of teaching and its application.

The system is designed to give the beginner the feel of hitting the ball correctly and to afford the advanced player a dependable method of developing strokes, footwork and form. The complete system makes possible the handling of groups and classes and permits instructors to plan and carry through long range programs. **Tom Stow, Dept. CUB, 1 Tunnel Rd., Berkeley 5, Calif. (Key No. 856)**

Slide Viewer

The new Kodaslide Table Viewer projects enlarged images from miniature photographic transparencies on a new type of rear projection screen built into the viewer itself. It is designed to be used in a fully lighted room even with color transparencies. It is therefore especially adapted for teaching and study purposes.

The new viewer is portable and occupies less than 10 by 12 inches of desk or table space. It holds 75 cardboard slides or 30 double-glass slides and projects a brilliant, detailed image on a 7½ by 7½ inch screen. The viewer incorporates projector, slide changer and screen in one unit. **Eastman Kodak Co., Dept. CUB, Rochester 4, N. Y. (Key No. 857)**

Pot and Pan Washer

The "Panhandler"—Model K is a compact pot and pan washer designed for institutional use. The unit washes and rinses pans, kettles, steam table pans, baking pans and other cooking utensils from above and below. The wash operation is performed with the Alvey-Ferguson "Super Spray" pressure system. It features an automatic hold down grid, automatic wash timer, uniform rinse and wash-rinse cycle signal with screen tanks and interlocked door.

The attractive washer, finished in white with stainless steel surface door, occupies only 6 feet by 5 feet 4 inches of floor space and has a tray size for a large load. The machine is designed to

accommodate all sizes and types of utensils including an 80 quart mixing bowl. **The Alvey-Ferguson Co., Dept. CUB, Cincinnati 9, Ohio. (Key No. 858)**

Garbage Container

Sanicon is a container which completely encloses refuse cans and keeps them fumigated with a special chemical compound built into a receptacle in the bottom of the unit. The hinged lid cannot be lost or broken and it will remain open when raised all the way, thus allowing the use of both hands for disposing of refuse. Metal aprons beneath the top doors funnel the garbage into the inside cans without spilling, the lid is closed and the garbage is kept free from vermin, flies, rodents and other pests and gives off no odor.

Constructed of aluminum alloy, Sanicon is rustproof and can be used either indoors or outdoors. It is mounted on 3 inch rubber-tired ball-bearing casters



and thus is easy to move to the site of garbage pick-up or disposal. Sanicon cannot be overturned. The deodorant, containing 5 per cent DDT, is harmless to humans and needs replacing only at 6 month intervals for maximum effectiveness. Sanicon is available in double size, holding 2 cans up to 26 gallons' capacity each, and in single size. **The Sanicon Co., Dept. CUB, Western Union Bldg., Norfolk, Va. (Key No. 859)**

Gym Finish

Johnson's Gym Finish, the sealer and top-coater for gymnasium and classroom floors, has been improved by the addition of new ingredients to the formula. It now offers greater protection against wear and abrasion, the surface is more water repellent thus permitting repeated washings without dulling and the drying time has been shortened. It will cover 350 to 450 sq. ft. per gallon on the first coat on a new floor and on later coats one gallon will cover 400 to 660 sq. ft. It is sold in 1, 5, 30 and 55 gallon containers. **S. C. Johnson & Son, Inc., Dept. CUB, Racine, Wis. (Key No. 860)**

Plastic Cup and Saucer

A new cup and saucer set, made of melamine plastic known as Lifetime Ware, has been designed especially for institutional use. The cup handle is set low to permit the base of the saucer to stack atop the cup firmly in serving with the saucer's flange fitting outside the cup to minimize spillage. Cups and saucers nest compactly for storage and cups have a capacity of 6 ounces each. Lifetime Ware has the weight and feel of fine china while being virtually unbreakable and chipproof. It is light in weight, is unharmed by high temperatures in dish washing and reduces noise in handling. **Watertown Mfg. Co., Dept. CUB, Watertown, Conn. (Key No. 861)**

Wood-Grained Wall Panels

Wood-grained panels on a base of tempered Presdwood have been developed to give the effect of wood paneling when used on walls. Known as Ser-Wall, the panels offer structural strength and insulation qualities as well as attractive appearance. The realistic wood-graining is achieved through a lithographing operation and is sealed by a coating of clear lacquer. The panels are easily kept clean with mild soap and water and do not peel, chip or crack. No finish is required on Ser-Wall panels.

Ser-Wall panels are now available in cross-fired figured walnut and in bleached walnut with other wood-grain finishes being developed. It should prove attractive and practical in lobbies, reception rooms, libraries and other locations in educational and dormitory buildings. The panels are ½ inch thick and are available in sizes from 16 by 72 inches to 48 by 96 inches. Beveled edges and scored borders facilitate application. **Service Products Div., Woodall Industries, Inc., Dept. CUB, 2035 Calumet Ave., Chicago 16. (Key No. 862)**

Concealed Door Closer

A new door closer has been announced which provides concealed control for any metal interior door up to 3 feet 6 inches by 7 feet by 1-¾ inches in size at a cost which compares favorably with that of an ordinary exposed closer of similar capacity. The closing mechanism is entirely hidden within the top rail of the door and only a slender arm, attached to the frame by a recessed soffit plate, is visible. Violent opening is prevented by a shock-absorber which is standard equipment and a hold-open arm may be specified. The closer can be installed in a minimum of time as both door and frame are previously prepared by the door fabricator. **LCN Closers, Inc., Dept. CUB, 416 W. Superior, Chicago 10. (Key No. 863)**

Film Splicer

The new Semi-professional Splicer developed by Bell & Howell is designed to handle both 8 mm. and 16 mm. films. The splicer shears both ends of the film diagonally and applies pressure to the film ends while they are being cemented. Heat is applied to the shear blades, thus shortening cement setting time. The splicer has provision for scraping emulsion from both the left and the right hand film ends and a gauge block on the splicer base simplifies setting the scraper blades at the proper working depth.

The splicer is designed for screwing to the work table and has an accessory sub-base to accommodate the splicer with a complete editing outfit. The base and operating arms of the new splicer are made of cast aluminum with hardened, ground stainless steel shear blades. **Bell & Howell Co., Dept. CUB, 7100 McCormick Rd., Chicago 45. (Key No. 864)**

Bulk Ice Maker

A new portable bulk ice maker has been developed to provide a low cost, convenient source of pure ice. It is available in 4 sizes, 250, 500, 1000 and 2000 pounds per day in approximately 12 hours of freezing time. Ice is produced in 50 and 100 pound blocks or the unit can be fitted with dividers to produce ice cubes. An ice crusher can be furnished in conjunction with the equipment if desired.

Because the walls of the freezing tank are refrigerated, the freezing cans are exposed to even and extensive prime refrigerated surface, assuring even and rapid freezing without the use of a brine agitator. Ice cans are constructed of heavy galvanized steel designed for long life and rough handling. The units are available in either electric motor or gasoline engine driven models. **Reco Products Division, Refrigeration Engineering Corp., Dept. CUB, 2020 Naudain St., Philadelphia 46, Pa. (Key No. 865)**

Typewriter Margin Justifier

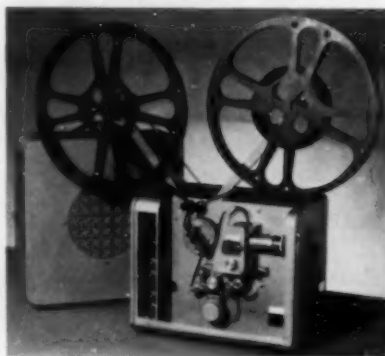
A new model of the Marginator, the mechanism to align the right hand margin of typewritten work, has recently been announced. It is designed to fit the proportional spacing Executive Model typewriter developed by the International Business Machines Corporation and makes it possible to prepare simulated typeset copy on the typewriter.

The device not only makes allowance for the variance in width of typewritten characters but provides automatic justification for the right margin. It should

be useful in preparing material for reproduction by any of the standard duplicating methods and should be especially interesting to those responsible for production of college newspapers and similar material. **Marginator Company, Dept. CUB, 2022 Glendale Blvd., Los Angeles 26, Calif. (Key No. 866)**

"Sound King" Projector

The "Sound King" Projector has been taken over by the Connecticut Telephone and Electric Division which company has brought out a new 16 mm. sound-silent model. The new model has been basically redesigned and reengineered, the more important changes including power rewind; 8 inch Alnico magnet dynamic unit; amplifier with a 5 watt output; safety interlock mechanism which automatically cuts off the motor and lamp if the film is lost; cushion action film shoes for added film life; simplified threading and gate operation, and a reduced number of sprockets and of gears in the gear



train, thus resulting in quiet performance, faster threading and less film strain.

Known as Model C-1, the new projector produces a sharp, brilliant picture, has rich clear sound, is light in weight and easy to operate. Of rugged, all metal construction, the projector and speaker are housed in carrying cases. **Connecticut Telephone & Electric Div., Great American Industries, Inc., Dept. CUB, Meriden, Conn. (Key No. 867)**

Alcohol-Resistant Wax

A new alcohol-resistant wax, which is designed to reduce floor maintenance in rooms where alcohol is used, has been proved impervious to alcohol under severest tests. This floor-protective wax can be safely used on any type of flooring since it is a water-dispersed Carnauba wax containing no harmful solvents. It is concentrated, self-leveling and does not increase slipperiness of floor coverings. The new wax should prove effective in laboratories, science departments, lunch rooms and other areas. **Huntington Laboratories, Inc., Dept. CUB, Huntington, Ind. (Key No. 868)**

Product Literature

- "This Formica World" is a new external house organ, the first issue of which appeared in October. This attractively laid out and printed booklet, illustrated in full color and in black and white and employing color throughout most effectively, is being published by The Formica Company, 4614 Spring Grove Ave., Cincinnati 32, Ohio. The editorial material contains much of interest to any executive, including a "sight seeing tour" through the new Terrace Plaza Hotel in Cincinnati, how Formica is used in air planes and the story of Pregwood, a combination of wood and plastic. The magazine is being sent to the company's customers and potential customers as well as to employees to acquaint them with new developments and applications of Formica products. **(Key No. 869)**

- Full information on "Terraflex, the New Plastic Asbestos Floor Tile" is provided by Johns-Manville, 22 E. 40th St., New York 16, in an attractive, full color folder. **(Key No. 870)**

- A new meat and poultry catalog has been published by Pfaelzer Brothers, Union Stock Yards, Chicago 9. Entitled "Pfaelzer Brothers Market Guide and Price List," the catalog lists all of the meat, poultry and cheese products available from this company specializing in service to institutions. **(Key No. 871)**

- "Mats for Every Purpose" is the title of a new 12 page folder issued by American Mat Corp., 1736 Adams St., Toledo 2, Ohio. Descriptive information on mats of rubber, wood, composition and steel and their uses in the promotion of sanitation, safety and comfort are included. **(Key No. 872)**

- A new booklet, "Canned Foods in the Economic Spotlight," presents the results of a 12 month research study conducted by 19 leading American Universities on the comparative cost and availability of 12 of the most frequently consumed fruits and vegetables. The booklet has been issued by the Can Manufacturers Institute, 60 E. 42nd St., New York 17. **(Key No. 873)**

- The Brown Instrument Co., Philadelphia 44, Pa., a division of Minneapolis-Honeywell Regulator Co., has recently issued a catalog, No. 15-13, on **Brown Elektronik Potentiometers**. The 31 page catalog carries schematic diagrams, photographs and dimensional drawings illustrating the constructional features and operating principles of the instruments presented. Also included are illustrative tables of various control forms, typical control systems, style selection tables and other data for the selection of proper instrumentation. **(Key No. 874)**

- A new catalog of **"Harold Equipment and Supplies for Colleges, Schools and Institutions"** has been issued by Harold Supply Corp., 100 Fifth Ave., New York 11. Illustrated and described are many items of furniture, dietary equipment and supplies, lighting, maintenance equipment and supplies and dormitory equipment. (Key No. 875)

- A comprehensive catalog of **"Edwards Electrical Signaling Communication and Protection"** equipment for schools, colleges, hospitals and other buildings has recently been issued, in semi-loose-leaf form, by Edwards and Company, Inc., Norwalk, Conn. The catalog is divided by marginal tabs clearly marked as to products and the complete index system makes it easy to find the desired data. Technical information, specifications, diagrammatic drawings and other illustrations on the complete line offered by this company are supplemented by detailed price lists at the end of each section. (Key No. 876)

- The new catalog of plumbing equipment issued by the Kohler Company, Kohler, Wis., is a reference book of value to business managers, architects and building-equipment committees. Commemorating the 75th anniversary of the Kohler Co., the 144 page catalog is fully illustrated with complete, concise descriptive information covering plumbing equipment for bathrooms, washrooms and kitchens, as well as details of drinking fountains, urinals and other fixtures. Floor plans and illustrations of matched sets are shown. (Key No. 877)

- Various types of brass fittings, with size and price listings, two and three way shutoff valves and drain cocks and cross section views of fitting joints as well as views of the same joints disassembled are some of the items described and illustrated in Bulletin No. 352, **"Handy Data on Brass Fittings,"** published by The Imperial Brass Mfg. Co., 1200 W. Harrison St., Chicago 7. (Key No. 878)

- An attractive booklet offering **"Apple Dishes by Eight Master Chefs"** has been issued by Appalachian Apple Service, Inc., Martinsburg, West Virginia. The booklet has been prepared for use by institutions and in addition to general information on apples, it contains quantity recipes for many apple dishes, illustrated in full color. (Key No. 879)

- **"A Catalog of Selected Publications"** has been issued by British Information Services, 30 Rockefeller Plaza, New York 20, containing a selected list of publications issued free of charge and listed under booklets and reference material. (Key No. 880)

- A new color sound motion picture entitled **"It Must be Somewhere"** has been completed by the Systems Division of Remington Rand Inc., 315 Fourth Ave., New York 10. The film is devoted to the importance to executives and department heads of modern methods of filing. (Key No. 881)

- The 1949 edition of the booklet, **"Floors That Endure,"** has been issued by the Tile-Tex Company, Inc., Chicago Heights, Ill. Included is a pamphlet showing the new 1949 Tile-Tex color line illustrating the new colors available in this practical, durable, attractive asphalt tile. Suggested patterns in asphalt tile are illustrated in full color in the booklet over the heading, "You can design your own floor—here are a few ideas!" (Key No. 882)

- The American Gas Association, 420 Lexington Ave., New York 17, has recently issued a most impressive book on **"Commercial Kitchens."** A reference book and guide for those concerned with volume cooking, the book has 242 pages and is board bound. In addition to information on the gas industry and the market for gas service, the book has chapters on commercial cooking, planning a new kitchen, planning modernization and alterations, layouts for kitchens, fuel other than gas and other helpful data. The book sells for \$5 and is completely indexed. (Key No. 883)

- A second set of large quantity recipes especially designed for lunchroom managers in schools, colleges and universities has been released by the American Can Co., 230 Park Ave., New York 17. Printed on attractive cards, the recipes are supplemented by information about canned foods, planning school lunch menus and the national school lunch program. (Key No. 884)

- A descriptive catalog of **Mercury Products** for institutional cleaning problems has been issued by The Theobald Industries, Kearny, N. J. Full information on cleaners and detergents for various cleaning problems is included. (Key No. 885)

- Buyers of fluorescent lighting equipment can make certain the fixtures they purchase will provide the performance that has been specified through a study of the new **"Fleur-O-Lier Index System"** booklet recently published by Fleur-O-Lier Manufacturers, 2116 Kieth Bldg., Cleveland 15, Ohio. Included is information on the evaluation of luminaires; data and drawings relating to fixture classification, shielding, brightness and service classification; standard specifications, test procedures and inspection procedures, and a chart on the Fleur-O-Lier Index System. (Key No. 886)

- An attractively laid out and printed booklet has been issued by David E. Kennedy, Inc., 72 Second Ave., Brooklyn 15, N. Y., entitled **"About Cork."** Sub-titled "An Architect's Handbook on Kencork Floors and Walls," the book carries information on the history of cork, physical characteristics of cork, why cork floors and walls, floor installation, wall installation, floor maintenance and protection, architects' specifications and other helpful material. Illustrations of cork installations add to the interest. (Key No. 887)

- A fire protection program is the subject of a booklet entitled **"Protection of High Value Areas"** issued by the National Fire Waste Council and the Chamber of Commerce of the United States. Fire facts and the plan for solving the fire problem are clearly stated in the booklet, copies of which may be secured from the National Automatic Sprinkler and Fire Control Assn., 205 E. 42nd St., N.Y. 17. (Key No. 888)

Suppliers' Plant News

American Tile and Rubber Co., Trenton, N. J., manufacturer of Amtico Rubber Tile, announces the opening of new showrooms at 281 Fifth Ave., New York, where extensive displays will show the complete line. (Key No. 889)

Columbia Mills, Inc., manufacturer of window shades and shade cloth, announces change of location from 225 Fifth Ave., New York 10, to 428 S. Warren St., Syracuse 2, N. Y. (Key No. 890)

The General Fireproofing Co., Youngstown 1, Ohio, manufacturer of metal furniture and equipment for offices and institutions, announces the opening of a new office and display room at 2121 Second Ave., Detroit 1, Mich., which will operate under the direction of R. C. Scott. (Key No. 891)

Pittsburgh Corning Corp., manufacturer of structural glass blocks and cellular glass insulation, announces removal from Pittsburgh Plate Glass Bldg., Pittsburgh, to larger quarters at 307 Fourth Ave., Pittsburgh 22. (Key No. 892)

Wright Manufacturing Co. is the new name of the manufacturing firm formerly known as Taylor Manufacturing Co. The company, manufacturer of Wright Rubber Tile, will continue its general sales headquarters under the new name at the present plant, 3056 W. Meinecke Ave., Milwaukee 10, Wis., but the main administration offices will be moved to the new \$2,000,000 Wright plant addition now under construction at Houston, Tex. A new general sales manager, **Bertram R. Scheff,** has been appointed by the president. (Key No. 893)

Build More Meals Around Heinz OVEN-BAKED Beans!



Tops In Food Value!

FULLY prepared—ready to heat and serve—Heinz Oven-Baked Beans are high in food value and make a hearty main dish by themselves. They help round out nourishing, appetizing meals. Richly nutritious, Heinz Oven-Baked Beans are ideal for fast, labor-saving service.

You'll find Heinz Oven-Baked Beans are economical to serve for there are no leftovers, no waste. Ask your Heinz Man or write H. J. Heinz Company, Hotel and Restaurant Division, Pittsburgh 30, Pennsylvania.

Ask Your Heinz
Man About

HEINZ OVEN-BAKED BEANS



A Talented Performer joins the Hobart Hall of Fame

The Original Federal *Steakmaker* takes its place
in the Greater Hobart Line

GREAT NEWS FOR KITCHEN MANAGERS!
The original Federal *Steakmaker* — pioneer and leader in the meat-tenderizing field — is to be sold and serviced through your convenient local Hobart representation — guaranteed by the biggest name in food machines.

In kitchens of all kinds and sizes, the *Steakmaker* has proved itself a

necessity in actually making tasty, lower-cost, *tenderknit* minute steaks and steak combinations from beef, veal, lamb, and pork. The *Steakmaker* design, like that of Hobart, has stressed superb quality, outstanding performance, sanitation and ease of cleaning. The combination of Hobart and *Steakmaker* is a natural!

What Hobart's hall of fame doesn't show is the simplified planning, purchasing and service always available, through Hobart representation, for the greatest line of food machines. It's a one-call convenience for your *entire food and kitchen machine installations!* See the Hobart-Federal *Steakmaker* and other Hobart products . . . local Hobart representation is always right in your picture.



Hobart Food Machines

THE HOBART MANUFACTURING CO., TROY, OHIO • Factories in Troy, Dayton, Greenville, Minneapolis, U.S.A. • The World's Largest Manufacturer of Food and Kitchen Machines

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Steakmaker tenderizers are now manufactured by Hobart-Federal Engineering Corporation, a Hobart subsidiary.



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A DIFFERENT PURPOSE**



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Baylor University, Houston, Texas
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